



GOOGLE STADIA CLOUD GAMING REDEFINED

EDGE

THE FUTURE OF INTERACTIVE ENTERTAINMENT

CONTROL

THE MAKERS OF MAX PAYNE TURN THE
RULES OF STORYTELLING UPSIDE DOWN



REVIEWED

SEKIRO: SHADOWS DIE TWICE
TOM CLANCY'S THE DIVISION 2
YOSHI'S CRAFTED WORLD
GENERATION ZERO
DANGEROUS DRIVING
HEAVEN'S VAULT

#332

JUNE 2019

BUILDING WITH FORTNITE

HOW EPIC IS USING THE
PLANET'S BIGGEST GAME
TO MAKE THE INDUSTRY
A BETTER PLACE



The revolution's here, and you know it's right

They say the first step in solving a problem is admitting you have one, and this issue is characterised by companies at varying stages of, and approaches to, transformation. In *An Audience With*, we hear how Epic Games CEO Tim Sweeney saw the way the wind was blowing seven years ago, and realised his company needed to change in kind. It was a decision that saw some of Epic's most prized talent walk away from the company. But today, only a fool would claim it hasn't worked out. *Fortnite* is the biggest game on the planet, and Sweeney and company are using their newfound power and wealth to improve the industry around it.

It's an inspiring tale, certainly, but the videogame business is full of cautionary ones too. This month, the online press reported that sales of preowned games were in freefall. That's something Microsoft tried to make happen with its original pitch for Xbox One; the market wasn't ready for it, and Microsoft lost the console generation in a heartbeat. Phil Harrison was part of the team that revealed that vision to the world. After a few years in the shadows he's at it again with Google's staggeringly ambitious streaming platform, Stadia. It has the potential to change, entirely, the way we play: no more expensive boxes beneath our televisions, our games playable instantly wherever we are in the world. Yet it comes loaded with caveats. In *Knowledge* this month, we weigh up whether the industry is really ready for high-fidelity games beamed to any screen over an Internet connection, or only Google is.

Remedy has long been one of **Edge**'s favourite developers, but it too found itself on the precipice of change a few years ago. Once a modestly sized shop working on one project at a time, its management realised that was no longer sustainable. It is now much larger, and has an awful lot more going on. The first fruit of that endeavour is this month's cover star, and given what the studio has gone through over the past two years its title is wonderfully apt. The *Control* story starts on p58.



Exclusive subscriber edition



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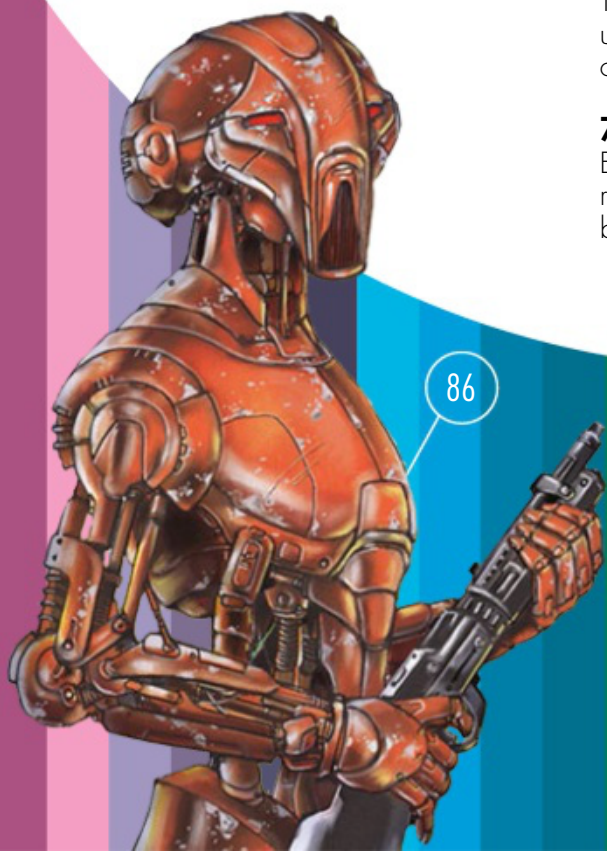
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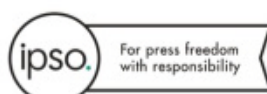
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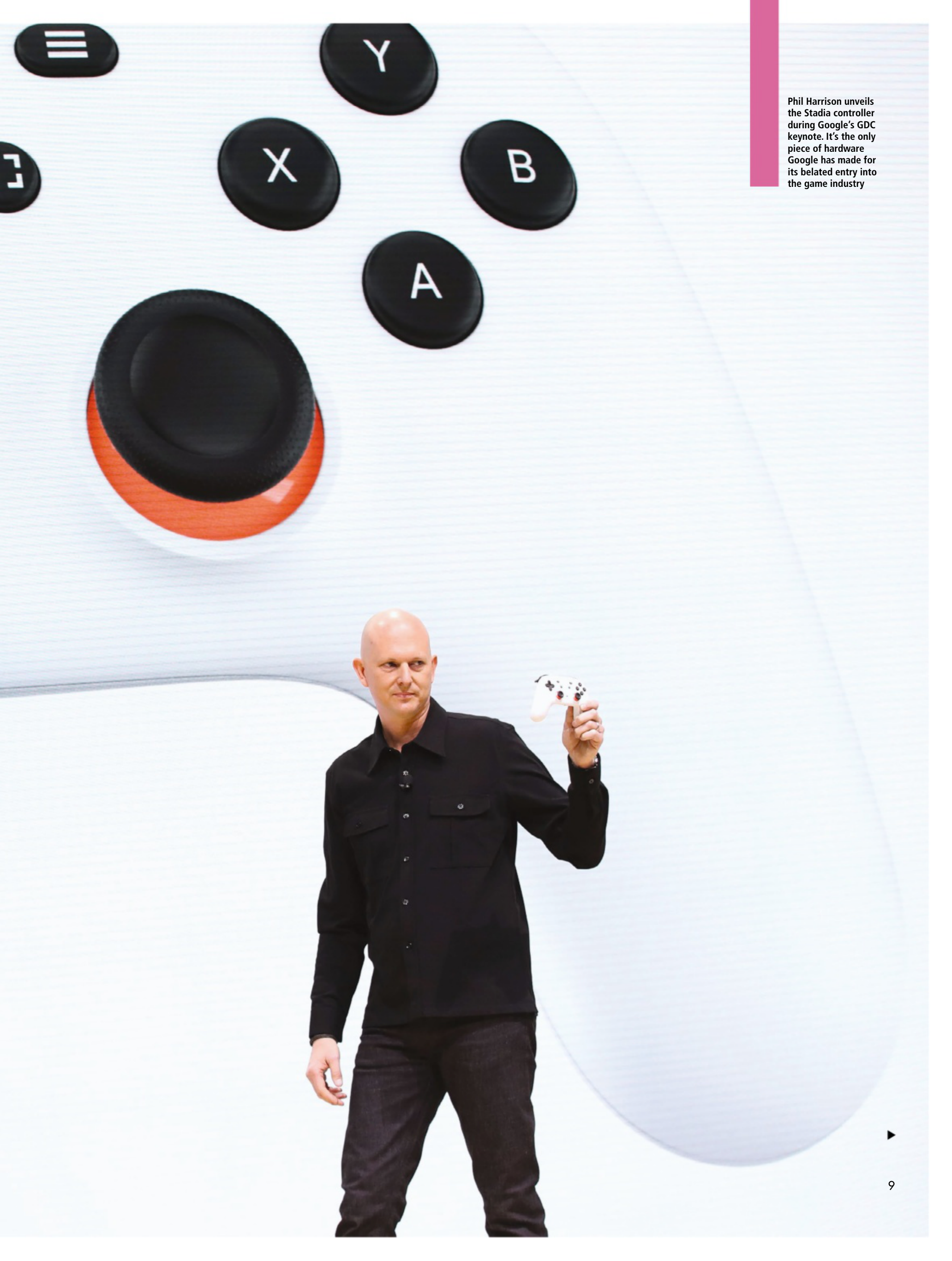
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Brave new world

Google's Stadia could [change the game industry forever](#), yet its coming-out party raises as many questions as answers

Phil Harrison unveils the Stadia controller during Google's GDC keynote. It's the only piece of hardware Google has made for its belated entry into the game industry



The presence on stage of Google CEO Sundar Pichai was meant as a sign that Google is serious about Stadia



Sometimes, change comes quietly. At others, it hits you with a sledgehammer. The formal unveiling, at last month's Game Developers Conference in San Francisco, of Google's long-rumoured cloud-gaming service ended up being a bit of both. There is no doubt that Stadia has the potential to change not only the game industry, but also the medium as a whole. It may even change the world. But it comes loaded with caveats, and questions to which Google does not yet have the answers – or not, at least, any answers it is ready to share just yet.

The pitch is irresistible, however. Stadia will let users play games at resolutions, colour ranges and framerates that rival the most powerful console hardware on the market – and then some – on any screen, over an Internet connection, through a direct

Google Stadia has the potential to change not only the game industry, but also the medium as a whole

connection to Google's sprawling global network of data centres. The Stadia platform will be upgraded over time, offering increases in processing power, without requiring that users pay up for new hardware. For developers, it offers a removal of the glass hardware ceiling, letting them push their work to previously

unfathomable heights and put it in the hands of anyone with a web browser, HDTV or mobile device. This is the stuff of science fiction; the sort of thing future-gazers have been telling us would happen for years. It launches in 2019.

"When we initially started thinking about what we could do with high-fidelity, triple-A games," recalls **Jack Buser**, Google's director of games, "it was just this real aha moment. 'Wait a minute. This could change everything. This could bring triple-A games to people all over

the world that previously wouldn't have access to them. We could free games from the boundaries of needing to buy an expensive box.' It was a magical moment when we saw the very first game – which I can't name – running on the platform. We all just stood there in awe. It was *real*."

But is it? There is a natural, and unavoidable, suspicion around anything involving games and the cloud. When **Edge** travels to some far-flung event and plays a forthcoming game, we know that what is in front of us is by and large representative of what you will be playing when, months or years later, the game finally releases. With something like Stadia there is no such guarantee. Yes, Google's decades of work building the infrastructure that powers so much of the Internet gives it a huge theoretical leg up on the failed experiments we naturally think of when someone mentions the cloud. OnLive didn't have Google's data centres; Gaikai lacked

While it feels great in the hands, the Stadia controller's central array of menu buttons will take some getting used to. Some curious icon choices don't help



Jack Buser, director of games, Google Stadia

the experience of running something on the scale of YouTube. Yet it is precisely our collective experience of the services that have come and gone before that makes what Google is promising seem as good as impossible.

Much of that comes from the belief that we, and avid game-players in general, have higher standards. Just as the committed film buff cocks a snook at Netflix for its too-low bitrate, or turns its nose up at Prime Video for its lack of Dolby Atmos, so those of us with multiple consoles under the television are entitled to be suspicious of what Google is promising with Stadia. There are simply too many things in the way, chief among them the likely bandwidth requirements and the input latency innate in sending a signal to a remote server and getting a response back. It seems technically impossible for any cloud-streamed game to surmount those hurdles. And so it's tempting to decide that if you're reading this, you're not really Stadia's target audience, that this is about a potential userbase of hundreds of millions of people – and that's a conservative estimate – who don't own dedicated videogame hardware, rather than those who already have plenty of it. That, Buser insists, is not the case.

"We need to build a platform that can satisfy every group, and that includes the hardcore gaming community," he says. "If we're going to build a platform that can bring some of the greatest games in the world to billions of people, we're going to have to build one that can represent those games appropriately. That's what we've done." He points to Id Software's 2016 game *Doom*, playable on Stadia's GDC booth at a faultless 60fps, making the point that if players are mindful of the impact of latency on a cloud-delivered game's performance, developers are even more so. "I've spent the last few years travelling the world and showing Stadia to some of the harshest critics of the performance of a platform: the people that make the games. When a creator brings a game to a platform, they're entrusting that platform to represent that game properly. You're talking about a tough audience, and no amount of me talking about it can

convince people that are sceptical. I just say, 'Play it'. Taking games around the world, just putting the controller in the hands of developers and having them play, you just see their eyes light up."

Said controller is the only piece of hardware Google will release alongside Stadia. And while your existing gamepads will be compatible with the service, there are several advantages – some slender, others much more significant – to using Google's own. First, and perhaps most importantly, it's a thoroughly pleasant thing in the hands, its sticks snappy and responsive, the nightmare of that leaked render that did the rounds a couple of weeks before the announcement thankfully nothing like the finished product.

An inbuilt Google Assistant button, that can be used to call up help when you get stuck in a game, may not on the face of it appeal to **Edge** readers. But how often have you sat with your controller on your lap, using your phone to look up a YouTube video showing how to get some seemingly unreachable collectible? This is not just for the masses. A capture button lets you take a screenshot, share a video clip or start broadcasting your game (Stadia actually outputs two streams of your session; one for playing, the other for sharing).

Most significantly, the controller connects directly to Google's data centres. The principal technical benefit of that is to cut out a little of the latency that comes from connecting to a screen, to your router and then to the data centre and back, though Buser points out that those who choose to play on other controllers will not suffer unduly. He also stresses that there's a substantial quality-of-life benefit to using the Stadia controller: since it connects directly to the data centre, it doesn't need to be individually paired with the various screens as you move your game session around. He recalls using the controller during the beta-testing period last year of what was

then called Project Stream, simply taking the gamepad out and carrying on with his game seamlessly, with no setup required. "When I stopped playing on Project Stream and had to go back to traditional console gaming, I totally missed that," he says. "I can't wait for us to launch so I can go back to being able to play games whenever I have time to do so. This [controller] is going with me everywhere when we launch."

Much needs to be done before then, however. The biggest challenge facing Google is convincing people that Stadia works as intended. The company says bandwidth of 25MB per second will be sufficient to run games at 1080p, and if that sounds fanciful, the claim that, by launch, a 30MB connection will handle 4K and HDR at 60fps seems impossible. Yet, no other company that has gone before has been better positioned to

deliver something like this: Google has an army of some of the most skilled engineers in the world, and the network infrastructure to match. Latency tests, such as those by Eurogamer's Digital Foundry, which found Stadia games to be broadly comparable to playing on a console, only go so far. The same goes

for the hands-on opportunities at GDC; yes, *Doom* ran at 60fps, but it was set up at a convention held in the tech capital of the world, just over 35 miles from Google's Mountain View HQ.

Google needs to get it into people's hands, then, and ideally for free, since few will be willing to take a punt on something that sounds so outlandish. There was no news, at least outside of meeting rooms, on how Google intends to structure and monetise Stadia – and for all the concerns over its technical viability, this may be its toughest nut to crack. Developers aren't going to be interested in making use of multiple instances of the 10.7 teraflop GPUs that reside in Google's data centres if they can only expect a slice of an attractive monthly subscription fee. Equally, the potential billions of new customers will only be brought on board if the price is right.

The biggest challenge facing Google is convincing people that Stadia works as intended



And, given Google's own track record, it may not seem wise for users to commit to Stadia from the off. The company has a history for quickly killing off things that don't take off; for every Google Maps, if you like, there is a Google Buzz. But the GDC keynote was opened by Google CEO Sundar Pichai, something we're assured doesn't happen for every new Google initiative. It has also hired Phil Harrison, veteran of Sony and Microsoft, as general manager; it has brought on Jade Raymond, the co-creator of *Assassin's Creed* who built studios from scratch for EA and Ubisoft, to head up its new firstparty development operation. Buser came from Sony, where he worked on PlayStation Now and Home. For all the promises it's made, Google is building a team that looks capable of delivering on them.

While GDC was Stadia's coming-out party, and Google certainly was talking to the world at large, this was at its core a pitch to game developers. The consumer effort will kick off this summer, when Google says it will show more of its game offering and, presumably, announce pricing and launch plans. Until then, yes, all we have are promises – but what promises they are. By the time the curtain drops on 2019, the game industry may have changed forever. ■



TOP The Stadia booth was certainly a draw at GDC, though it naturally did little to allay any lingering concerns about how the platform will perform in the wild. The real action was in meeting rooms, where Google went deeper on its pitch to developers from around the globe. **ABOVE** *Assassin's Creed Odyssey* and *Doom Eternal* were canny choices for the unveiling, showing Stadia can handle graphically lavish open worlds as well as fast-paced, fluid FPSes

VIDEO STARS

Capturing the hearts and minds of a new generation



YouTube is central to Stadia – not least because of how many people watch videogames on the platform, which proved to Google the promise of games in the first place. The two platforms will be closely integrated: if you're watching a video of a game that's available on Stadia, you'll be able to play it in a single click. The Stadia controller's capture button will make sharing your session to YouTube just as easy. And Google wants to bring YouTube creators closer to their audiences, letting players queue up to join their favourite vlogger's game session. Not for us, certainly, but we know plenty of kids for whom this is arguably Stadia's single biggest draw.

Leading light

How Unity is democratising dynamic graphics, and what it means for the next generation of games

You couldn't walk five feet at this year's Game Developers Conference without bumping into a talk on ray tracing. It was the hot topic of the show, with Unity Technologies announcing it had partnered with Nvidia to offer the engine's users early access to realtime ray tracing via a preview function in the High Definition Render Pipeline. For developers, it's a heady proposition: the ability to render industry-leading, dynamic, photorealistic graphics with heretofore unparalleled precision and ease. For players, however, it's perhaps more challenging to rouse an interest in the nitty-gritty of physically simulated lighting effects – but, as Unity Technologies' VP of graphics **Natalya Tatarchuk** explains, it's about to change the face of videogames entirely.

At its keynote, Unity showed footage of a ray-traced 2019 BMW 8 Series Coupé next to shots of the real thing, and dared us to tell the difference.

HDRP was initially rasterisation-only: this is the way games have long rendered 3D objects on a 2D screen, with polygon meshes doing a decent (but computationally intensive) job of rendering high-fidelity scenes. "We've evolved HDRP to support ray tracing on whatever frequency you want to support," Tatarchuk says. "With ray tracing, you are doing global operations, and optical computations in order to compute the resulting shadows from an area light, which is very similar to the way that real light bounces around the environment."

Instead of pre-entering approximate information about how light *should* behave in a situation, developers can use realtime ray tracing to simulate how our

eyes process light. We're taken on a tour of that ray-traced BMW, its leather seating so sumptuously textured as to be indistinguishable from the real thing. The gearbox is a particularly complex operation, made up of several layers of glass of different opacities, and needing to support refraction. "You can see how the light is popping through and there's emissive glass in there," Tatarchuk says, "and that's something that rasterisation has not been able to grasp. In fact, none of the competitors' solutions can actually do this level of fidelity. The reason we're able to do it in our solution is because we're actually doing full path tracing for this object." Beams of light are shot through, and Unity's algorithms calculate what each point on that path should look like.

Toggle it off, and now looks rather flat. But the ability to toggle will be crucial for developers. The algorithm is scalable, meaning that Unity devs will have greater control than ever over where to spend their computational budget in their game. It's

how Tatarchuk is running this demo on a laptop. "We can change the number of rays that we're shooting based on hardware performance characteristics," she explains. "Devs can say, 'I really want to make this a hero object', and make sure we're shooting optimal amounts of rays, using the highest quality denoising – the thing that removes the sparkles, the illusion-breakers. And then, 'This object can be a little bit blurry, but I need it to be faster.'" Think, perhaps, of how *Sekiro: Shadows Die Twice* might use the tech: cutscenes could be made lavish with the use of ray-tracing, with the algorithm

HEAD IN THE CLOUD
Unity Technologies always has an eye on the future – so what's the next big hurdle in videogame graphics? "The biggest challenge will be the complexity of completely dynamic worlds," Tatarchuk says. "And that will come with tremendous data sizes that will come with cloud connections, how we're going to be able to serve it on any device." That, of course, is a huge ask in terms of data. "And making it work with ray tracing, with all of the advantages of new technology, mesh shaders, all of the novel APIs, etc, in tandem – that's going to be a big focus. Well," she smiles, "we're already sinking our teeth into it."

adjusting for performance instead during computationally intensive fights.

Unity has had to wait for hardware to catch up to its vision: with the advent of Nvidia's new RTX graphics cards, it now has the teraflops to action its innovations, and today's APIs are advanced enough to express them. "A lot of effort was spent on, simplistically, optimising the hell out of it," Tatarchuk says. "Without that, we'd be able to render ambient occlusion or even just reflections – but not *all* of it, together. And certainly not on a laptop." It's great news for devs, then, but why is it taking off now? "The industry at large is both craving the complexity of the results, and now empowered to actually take advantage of it." And as we move from 'baking' scenes (making assumptions about how a scene might look, before optimising it and setting everything in place) to realtime ray tracing, worlds will become truly visually dynamic. "I want my game world to be living – I want to interact with the environment. When I pick up this cup," – she does so – "shadows move. Why does it look wrong? It bothers me. With ray tracing, players won't necessarily know why, but they will realise that they can relate to that place better."

Ray tracing, then, is a glimpse into what next-generation games will look like. Tatarchuk is coy, but Unity has been quietly preparing for the standard of the future, and some of this generation's games are already testing it out. "We've made this available now so that people who are making next-generation games can take advantage of it, and ship games at this fidelity or higher. But I will not be able to share what I will not be able to share!" She laughs. "Put it this way: we certainly have a lot of reasons for why we invested into this technology." ■

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Rendered in real-time with Unity



When it wasn't treating us to long, lingering looks at bits of virtual car, Unity's keynote gave us our first glimpse of the company's 'digital humans' via in-engine short film The Heretic

Chaos theory

UKIE's Dr Jo Twist on **the need for cool heads** during turbulent times for the UK game industry

You wouldn't say it's an easy time to be the figurehead of a trade association whose mandate is to ensure the UK is "the best place in the world to make and sell games". In fact, UKIE CEO Jo Twist has had a particularly busy last 12 months or so. Among the issues she's been tackling lately are the WHO classifying 'gaming disorder' as a mental health condition (a development Twist says has been "highly contested by scientific experts around the world") and the Gambling Commission scrutinising the business models and mechanics of modern games – chiefly loot boxes, but also skins betting in games like *Counter-Strike: Global Offensive*. On the eve of the London Games Festival, and ahead of her keynote address at this year's Develop in July, Twist doesn't want to get unduly concerned about any of this. "Generally, I want to make sure people understand that this stuff is all part and parcel of [videogames] becoming a really important part of culture and people's lives."

There is a rather larger cloud hanging over the UK industry at the moment, of course: Brexit. At the time of writing, nothing has been resolved, and Twist admits the uncertainty is having a not-insignificant impact. "A lot of companies have already had to spend quite a lot of money on contingency planning," she says. "And obviously that's not just within the game sector. But it's important, particularly as in the game industry we're largely made up of small and medium enterprises and businesses. So these things can be a financial burden – but of course they still need to be done."

One of the most pressing issues is the recruitment and retention of the industry's

international workforce. Roughly 57 per cent of businesses in the UK games industry hire EU talent, Twist says. "That diversity of global talent is critical to our success creatively, and in terms of innovation." Anecdotally, she's become aware that more people are concerned about accepting job offers in the UK, because they're uneasy about their future. "We're all growing older as the industry gets older, and a lot of people now have families to consider. It's an important decision." Indeed, UKIE has been lobbying hard for an overhaul of the current Tier 2 Visa system, to help ease a time-consuming administrative burden for a lot of companies. "At the moment, the proposal in the current deal that has been

rejected, suggests a minimum salary threshold of £30,000, which is not acceptable to the game industry. Including London, our average salaries full stop are £33-35,000. So that's going to cause issues for us."

Still, Twist is staying positive; indeed, UKIE is determined to highlight the

positive progress made in many areas of the industry. She points to improvements in the protection of younger players, and how parents and guardians are now better informed about which games are suitable to play with children. "All of that information, as well as parental controls and details about age ratings, is already available on askaboutgames.com. But what we really need to do now is to make sure people know about it. We want to empower parents and carers who are confused about games, because they ultimately are such a fulfilling hobby and pastime to have in your life."

CRATE DIVIDE
Loot boxes have hit the headlines in recent times, with a number of scare stories in the mainstream press. Twist is keen not to gloss over the issue, and says that UKIE has "a very good relationship" with the UK Gambling Commission; it often assists with research into the phenomenon. "Though some of the research you might find around some of these bigger issues around games is just not high quality – again, that's a conclusion that is reached by a lot of other academic experts," she says. It's important, she adds, to make sure there's no knee-jerk reaction to hysterical coverage. "We're in a new kind of information age, and we do need to make sure that consumers generally are equipped and protected – but also that we're not overstepping the mark when it just might be some kind of media panic."

Twist's appointment last year as the Chair of BAFTA's Games Committee speaks to her passion for culturally enriching games; she cites last year's introduction of the Games Beyond Entertainment award (the inaugural prize was won by *Hellblade: Senua's Sacrifice*) as a particularly valuable seal of approval for a massmarket audience. "We like evidence and research that shows the positives and the diversity of the games we play. What's missing is a mainstream awareness of the whole range of different games that are available, and what those games bring to people's lives. So having BAFTA shine a spotlight on some of those games that the general public might otherwise miss is incredibly important."

"We mustn't forget that escapist fun is really important to being human as well," she continues. Particularly at the present time, right? She laughs. "Well, there's a lot that's still up in the air at the moment. I just want to present the facts. To reassure people that it's never been more important to act collectively, to shout with a single voice about our responsibilities, and to really celebrate games." We dare say this sounds like the kind of calm, level-headed leadership the UK could do with in government at the moment.

If she had one message to deliver to the UK industry, then, what would it be? "Basically just not to worry," she says. "This sort of thing has happened with every single popular-culture movement, whether that be rock music, Elvis Presley – or even the Gutenberg press. People had panics. And at a time of uncertainty, which is happening globally, there are some people who perhaps like to inflate those panics." So, in other words, everything will be alright? She laughs. "Everything's going to be okay, yes." ■

Twist will deliver a keynote address at Develop in Brighton this July. Tickets are available now at developconference.com



Mutazione's art style takes inspiration from graphic novels, anime such as *Future Boy Conan* and Eric Chahi's *Another World*. The ensemble-cast format takes its cues from *Star Trek*



NATURE AND NURTURE

Die Gute Fabrik's mutant soap opera, a decade in the making, is an intimate meditation on family ties and the passage of time

With your ailing grandfather needing help, you catch a ferry to the swamp village of Mutazione, a community of gossipy mutants (and humans) with relatable problems. "Normally mutants in games are evil, and have distorted features," **Nils Deneken** says. "But when you draw them differently, you can make them loveable. 2D art can be much more alive and vibrant, it has much more expression. You give them backstory, make them talk – suddenly, they become characters you could take seriously."

After nearly ten years of development, *Mutazione's* lush post-meteor landscape has grown

from the setting of an animated film into a interactive soap opera and placid musical gardening sim: flowers grow in ambient harmonies according to how they're planted. "Doug [Wilson, lead designer]'s main inspiration was Music For Airports by Brian Eno," Deneken says.

You tend to your gardens and your grandfather, as stories blossom around you. "I always was fascinated by ruins and what kind of stories they tell," Deneken says. "I love plant life taking over, overgrown surfaces and how the shapes change." *Mutazione* will creep onto PC and PS4 this year. ■

Soundbytes

Game commentary in snack-sized mouthfuls



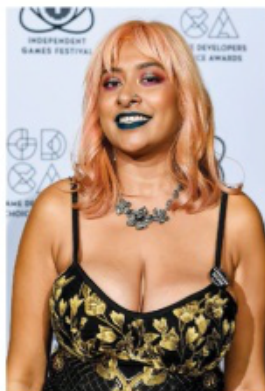
"I'm bummed that it sold like there was a last-minute surge in demand. It reached number three on Amazon's sales rankings. But I did kind of think, **"Why didn't you just buy from the start?"** Of course I'm glad in any case."

Toshihiro Nagoshi reflects on a huge sales spike for *Judgment*, which Sega removed from sale after one of its cast members was arrested for cocaine use



"All of the major investment coming into gaming is welcomed. If Google can bring more people to play games more often, then obviously we believe we will benefit."

Game's **Martyn Gibbs** is right: streaming isn't coming for retail's lunch. Lunch finished ages ago



"It is time, more than time, that we as an industry left behind the idea that **our work is made better by our pain.**"

Narrative designer and *80 Days* writer **Meg Jayanth** calls publicly for game developers to organise during the IGF Awards

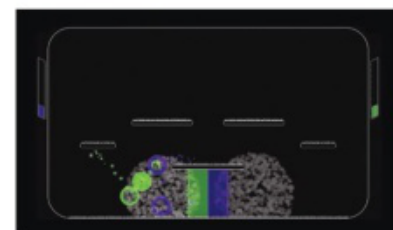
"I hope this isn't controversial, but **fuck white supremacists.**"

Tim Schafer, we think San Francisco in GDC week is a pretty safe time to say that. Everybody keep saying it



ARCADE WATCH

Keeping an eye on the coin-op gaming scene



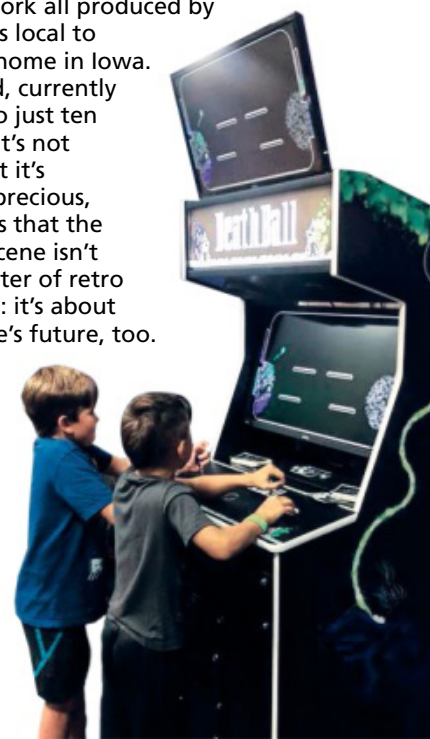
Game DeathBall
Developer Tony Hauber

Times are tough in the arcades these days: if you've not got a recognisable name, an absurd fifty-grand cabinet or fancy VR gimmick – and ideally all three – it's hard to gain much of a foothold. Luckily, no one appears to have told Tony Hauber, designer of *DeathBall*, about that.

The original game was knocked together in just six days, in the run-up to a tournament for the RTS/platformer hybrid *Killer Queen*, held at San Francisco's Brewcade venue during GDC week. So the legend goes, Hauber's laptop, running a prototype, drew a crowd; the bar's owners told him that if he made a cabinet, they'd install it. He did, they have, and it's now in eight locations across the US.

It's a deceptively simple game, played with a joystick and a single button, though there's plenty going on as two wizards try to knock a magical ball into their opponent's goal. As a spectator sport, its cabinet comes with a second screen, mounted on top, to save onlookers craning their necks. In a modern touch, accessible HDMI ports make livestreaming or recording a breeze. It's a local project, too, with the cabinet and vinyl artwork all produced by companies local to Hauber's home in Iowa.

Limited, currently at least, to just ten cabinets, it's not cheap, but it's certainly precious, and shows that the barcade scene isn't just a matter of retro revivalism: it's about the arcade's future, too.



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Leanne Loombe, Riot Games



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Laura Dodds, Dream Reality Interactive



Beyond Bandersnatch - Designing for Interactive Narrative and Live Action

Jack Attridge, Flavourworks



Elegance vs Intricacy - When Your Design is Too Good to Have Depth

Tim Fletcher, Jagex



Successful Crowdfunding: A Kickstarter Post-Mortem

Cari Watterton, Puny Astronaut



ArtyFax: An Augmented Reality Game Designed for and Created by Children

Richard Vahrman, LocoMatrix



Early Access: The Why and the How

Ollie Purkiss, Wonderstruck



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Everything We Did to Chart on Steam

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My Favourite Game

Porter Robinson

The electronic musician behind *Virtual Self* on the tragedy of lost game worlds and the future of escapism

Porter Robinson is a prolific electronic artist with an uncompromising yet ever-changing sound, from 2014's ethereal *Worlds* to the gritty neo-trance of his current project, *Virtual Self*. Here, he discusses dying MMOs, the experimental future of VR and the musical legacy of *Jet Set Radio Future*.

When did you first get into games?

My earliest memory would be when I was about four years old. We had an MS-DOS computer in my childhood home and I remember pretty vividly playing a game called *Mission To Mars*. I had no sense of there being a difference between different videogames at that time. It was also impossible for me to open the game so I always had to call my parents over, and they had to type it in.

You've said before that *Worlds* was inspired by a dying MMO. Why is that?

MMOs are in such a unique situation. These games are incredibly difficult to archive, and usually require massive community efforts to reverse-engineer the servers to see them again. It's a perfect storm for creating extreme emotional situations because – and I'm generalising – but maybe a lot of people who are into this idea of escapism and fantasy end up going there. For a lot of people it was a place that they could excel or be cool and maybe they couldn't do that in real life. They could form friendships in this transhumanistic way, creating this avatar, this ideal version of yourself. I think a lot of people are drawn to that. Then, as soon as the games are no longer functioning or profitable, these people

RHYTHM HEAVEN
Robinson's *Virtual Self* single *Angel Voices* recently made the *Beat Saber* tracklist. Initially, he was opposed to the idea of dropping music from the project into rhythm games, but playing the resulting level changed his mind. "It was transcendent. They picked almost all of the right rhythms, I almost cried. And because the tracklist was so small when *Angel Voices* came out, and it was an Expert chart, that was kind of like the boss battle. I loved that. I really want to be an advocate for VR games because I've had so many incredibly rich, nuanced experiences in VR in the last year that really reminded me of being 13 or 14 years old and playing MMOs for the first time."



lose their friendships and their homes. To me, that was so compelling.

You're a big proponent of VR, too. Are there any particular games that have moved you?

Definitely *VR Chat*. It kind of got this meme status, which is whatever, but I've made some actual friendships in that game. I had this one experience where me and this group of strangers were playing, and there was some item that was lost on the map and the map was giant, so we all set up to find it. It made me imagine really vividly what a VR MMO could be like.

In the early days of MMOs the rules hadn't been developed for the genre, and I think there's a real magic during the exploration phase of any new good idea. I feel the same way about electronic music genres. When the

first era of a new genre or trend pops up, that's when it's usually at its most creative and has the most momentum. After two or three years it starts to get stale and the tropes of the style really start to fit into place. Then people are just copying this prototype they have in their mind. The same thing happened with MMOs. Now VR is in its exploration phase, developers are figuring things out, and it's so fun to be a part of it.

How do you like to play games?

I never finish them. I like to get the flavour of something, and then that's enough for me. I don't feel any completionist drive in

an RPG to find out what the ending is. I guess I'm more interested in the worlds.


Are there any specific videogame composers you admire?

I love Hideki Naganuma; the *Jet Set* soundtracks are so good. When I hear that music, it sounds like the *Jet Set Radio Future* graffiti – it feels so chaotic. And Bemani artists like Sota Fujimori and DJ Taka, Naoki Maeda were big influences, sonically, on the *Virtual Self* project. These guys made a lot of songs for *DDR*, *IIDX* and *Beatmania*, but I'd also be remiss not to mention an artist named Onoken.

He was always my favourite, and I discovered his music through *Stepmania*, which is basically playing *DDR* on a computer keyboard.

What's your favourite game of all time?

You know, I don't think I've ever been asked this before. My favourite game of all time... I think there's a bit of fate happening right now because I'm pacing around my room holding my phone and I'm actually standing on a giant metal *DDR* machine that I have. *DDR* was the reason that I began producing electronic stuff 14 years ago now. I think that I would be doing the game and myself a disservice for that not to be the answer, although I would also attribute a huge amount of love and inspiration to *Star Wars Galaxies*, one of my first MMORPGs, the first time I felt connected to other players online. I made so many memories and so many friends. ■

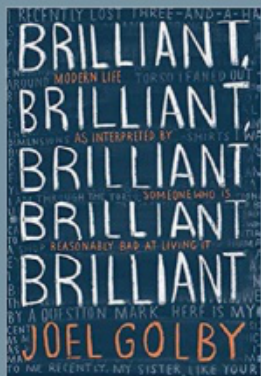


The Virtual Self track Angel
Voices was locked behind a
puzzle when it was first
added to *Beat Saber*; now
it's unlocked from the start

BOOK

Brilliant, Brilliant, Brilliant
bit.ly/brill5book

Joel Golby, writer for Vice UK and author of *Edge*-favourite column *London Rental* Opportunity Of The Week, has written this collection of personal essays that veer between sickeningly funny and sincerely beautiful. There are a few nods here and there to the role that games have played in Golby's life – but 'Twitch.tv' is the full-fat homage to their influence on him. We find ourselves nodding along as he tells us how he relaxes by watching hypnotically perfect headshots; he recalls a childhood spent baring his soul to the back of his best friend's head while he played *Quake*, and muses on the way Twitch recaptures the same feeling. It's so spot-on it's worth the price of admission alone, even before you get to the screeds on hot sauce, Rocky IV and the demonic power of Monopoly.



VIDEO

One-button Mario 64
bit.ly/1buttonmario64

You might remember Dylan Beck, aka Rudeism, from E316: the developer and Twitch streamer spends his free time rigging up bananas and frying pans, before using them as makeshift controllers to play videogames. His latest project is elegant in its simplicity – playing through the entirety of *Super Mario 64* with just one big, red button and a vocabulary of Morse code-eque taps. With programmed combinations of long and short presses, he's managed to mash his way through a game of which we thought we'd seen every conceivable speedrun, culminating in a tense Bowser boss fight.

WEB GAME

Santa Monica By Night
bit.ly/smbynight

Made for itch.io's recent Vampire Jam, *Santa Monica By Night* is a darkly atmospheric point-and-click narrative adventure. It's set in the *Vampire: The Masquerade* universe, its grubbily, blurry pixelated LA streets littered with references – although you certainly don't need a working knowledge of it to enjoy this. Cast as a 'thin blood', your job is to hunt the elusive Vincent Lenz through the city. There are no real puzzles: instead you enter into bizarre conversations with the locals and work your way to one of multiple endings based on your choices. The writing can be a little hammy, but there are some lovely ideas here – not least of which is the way the character you're controlling often turns to address you directly through the screen while you're checking out items.



THIS MONTH ON EDGE

When we weren't doing everything else, we were thinking about stuff like this

HARDWARE

Analogue Mega Sg
bit.ly/analoguemega

It feels like no coincidence that Sega should officially confirm the Mega Drive Mini in the same month that purist-nostalgia merchants Analogue should release their own spin on Sega's 16bit console. For those of you with a generous collection of carts, this is a no-brainer: a beautifully made USB-powered console that runs Mega Drive games with 1:1 accuracy over an HDMI connection. A cautionary tale, however, to those of you who haven't played a Mega Drive game in a while: physical media decays, and it transpires that around half of our collection no longer works. Off to eBay we go, then – this thing's too good not to put to regular use.



continue

Silent protest

The r/games subreddit goes quiet for a day to object to "vitriolic" comments

Respect your elders

Shirley "Skyrim Grandma" Curry will appear as an NPC in *The Elder Scrolls VI*

Virtual link

Breath Of The Wild will be fully playable with Nintendo Labo VR. Heavens

Signs and signals

Valve is teasing its own VR headset for May with the name Index

quit

Cry wolf

An accusation of plagiarism leveled against a *Fortnite* skin is a hoax

Missing link

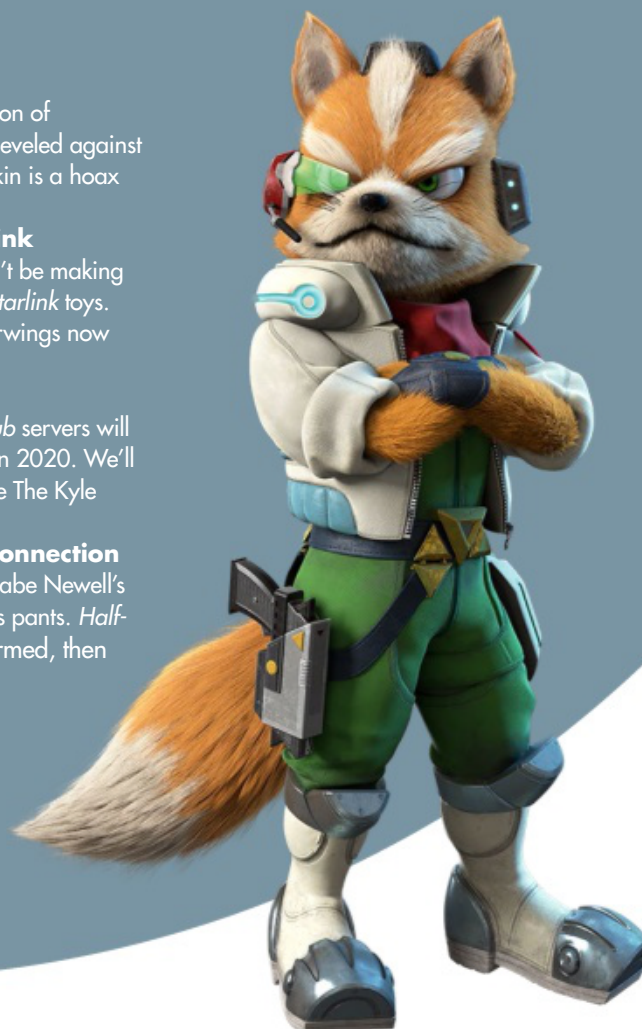
Ubisoft won't be making any more *Starlink* toys. Buy your Arwings now

Final lap

All *DriveClub* servers will shut down in 2020. We'll always have The Kyle

Drawer connection

In China, Gabe Newell's likeness sells pants. *Half-Life 3* confirmed, then



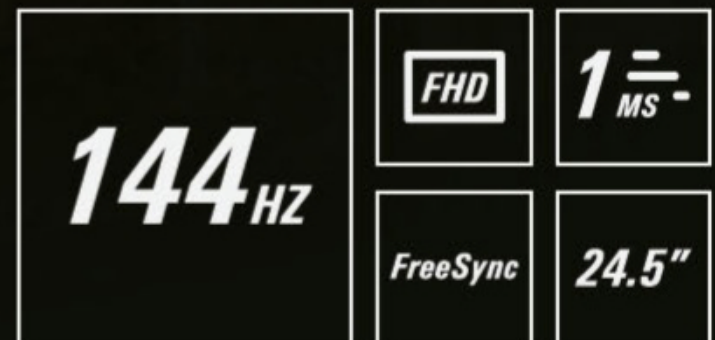
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DISPATCHES

JUNE



Issue 331

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins a year's subscription to PlayStation Plus, courtesy of Sony Interactive Entertainment



PlayStation®Plus

Poison

Around 15 years ago, we were living in the time of ARGs — games that spiralled out of the screen, into phone messages, geocaches and other real-life facets. Whilst Majestic and I Love Bees certainly seemed to capture a lot of attention at the time, nowadays we appear to be back to staring at a monitor as a self-contained source of entertainment.

I have to say, I miss that era — one where I would find the next 'level' on a message board or as a video elsewhere, and having thought that the confluence of games and the real world was inevitable, find myself somewhat disappointed. I guess titles such as *Ingress* or *Pokémon Go* have enabled us to use our real-world settings as the

environments to compete, but there appears to be very few titles where the developers have considered the tactile nature of our own world as a place to compete or discover — *Trials*' wild 80-year challenge aside.

I still expect that at some point in the future we will see this convergence of our own world and games; it remains a tantalising sense of surprise, to see videogames reflected and even played in our own lives. But I do have to ask: what happened to the sense of adventure and optimism that permeated those early '00s ARGs? Did the smartphone kill their hopes, or were they just too ahead of their time?

Martin Hollis

It's just a lot less work to hire a social media intern and get them to do memes for you. The Internet was a terrible mistake.

Their law

How sad to witness BioWare's fall into the abyss of nonsense and lack of respect for all its players and employees. A well-known and prestigious studio following a modus operandi that has very little to do with making sure that the product they are

creating and eventually shipping is worth their reputation and, even worse, a studio that doesn't seem to care about their employees' mental health and wellness.

As Jason Schreier exposed in his recent Kotaku article about *Anthem*'s development process, things need to change in this industry as soon as possible. Crunch is the result of two things: uselessness and inhumanity. Videogame developers should feel as empowered to fight for their rights as any other workers. Work-life balance is not an extra, it is a mandatory requirement if you aspire to consider yourself a decent company. This is not the first time that we hear about this issue. It happened with Rockstar in the

past. It has been happening within BioWare during the last few years, and that seems only to be the start.

The videogame industry needs unions in order to grow up and have the right to be considered a respectable business. No matter the grandiosity of your creation if it has been built out of slavery.

Petrum Josephum

Slavery is probably going a bit far but, yes, it does appear to be time to unionise. One question, though: what's 'work-life balance'?

Mindfields

I'm glad to see that Steven Poole piece on choice-based story telling in E329 has inspired ongoing discussion in your letters pages. I haven't watched *Bandersnatch* because it is *Black Mirror*; if I want depressing, dystopian nonsense that makes me faintly embarrassed to be human, I'll watch the news. But I take issue with Steven's apparent belief that just because it doesn't aspire to truly independent branching storylines, the choices are somehow worthless.

I am a big fan of *Life Is Strange*. Both season one and *Before The Storm* are



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Discuss gaming topics with
fellow **Edge** readers

essentially linear story-based games that give players many choices. I don't want to say too much because I'm precious about spoilers, but there are not a lot of endings to these games. So what's the choice for? They change the characters and the player, not the story.

All the choices in these games are designed to alter how the characters relate to each other, and how the player relates to the characters. This makes a profound difference to how the story beats are viewed and understood, even when those beats aren't actually different. The evidence that this works brilliantly, at least for some players, can be seen in the regular emotional posts from first-time players in the *Life Is Strange* subreddit. One, a few months old now, about *Before The Storm*, is mine.

Probably Steven Poole the reductionist would count the dozens of choices, count the number of endings, and discount these games. If so, I think he'd be missing out.

Tony Park

As always, we put this to Steven so he could respond personally. His reply is now with a team of linguists, working night and day to turn it into something we are capable of vaguely understanding. More as we have it.

Everybody in the place

I absolutely love the credits page on page six of **Edge**. I know, I know. But give me a chance to defend myself. **Edge** has always been filled with interesting articles, not only written brilliantly, but passionately. You can feel from reading an issue cover to cover that these writers are pouring themselves into the words in **Edge**. It's reading articles from magazines like **Edge** that got me into writing in the first place.

What's so fantastic about the credits page at the start of **Edge** is that it's clear that the people who make **Edge** believe that too. The masthead is in its rightful place at the top of the page, but it's neither too big nor gaudy as to distract from what's really

important: the names underneath. First, there's the editorial, the backbone of the mag and names that readers have come to recognise immediately. But immediately after that, you credit the contributors with the same level of respect given to the core staff. It lets readers know that these writers are just as valued as your peers, and that is incredibly encouraging for those who dream of their byline being there one day.

That respect extends to every other person whose work goes into **Edge**. People in advertising, circulation, and production are given their credit alongside writers. The page is black and white, putting those who work hard on **Edge** front and centre, declaring, "No, these people deserve your full attention". Everyone's name is bold, so even someone skimming through will be drawn to the staff's names.

These little details speak volumes about the importance you place on people who work on **Edge**. I'll always be drawn to the articles in **Edge**, but I'll continue acknowledging those on page six.

Connor Makar

Erm, blimey. All this, and not even a mention of the hallowed Secret Club. Thanks for abiding by the rules, at least. Your membership is safe.

Break and enter

Like many **Edge** readers of a certain age, my gaming experiences are constrained by time, not money. However, I draw the line at buying multiple 'boxes' that play much the same stuff bar a few exclusives. That doesn't mean I don't occasionally look wistfully at games I can't play due to a buying decision I made five years ago.

So when Google announced Stadia, I wasn't so much interested in the short-term concerns around lag, latency and Google's track record of ditching unsuccessful experiments as I was in anticipating a gaming utopia where I could play any game, any time without worrying about which next-gen console (or PC rig) to invest in.

A few days of reflection led me to conclude that those days are some way off. Let's assume that a Google, Microsoft, Amazon or whoever

manages to crack the technical issues everyone focuses on regarding streaming games. Can I visualise Sony releasing their exclusives on Microsoft's Project xCloud? Or Rockstar spending eight years on their next opus only to release it to subscription services where consumers get the latest triple-A games at no extra cost? Or Ubisoft, EA or Activision forgoing their annual £50-a-game franchise in place of gamers streaming via Stadia? And what about those indies who live hand-to-mouth in anticipation of the next big payoff? Spotify is notoriously stingy with payments to less popular (but still interesting) artists – why would gaming subscriptions be any different?

This leads me to conclude that, whilst game streaming might be suitable for some games and some gamers, we'll still end up with a world that is, at best, fragmented by streaming providers, just as TV is today. Further, I can't envisage a thirdparty subscription model where you don't have to fork over upfront cash to play the latest triple-A release on day one. I can't watch the latest Marvel movie on Netflix, after all, I have to go to the cinema. Ask me to 'buy' a game via a streaming platform where I don't have control of downloadable or physical media? Wow, that'll have to be some exclusive.

At a stroke, my interest in Stadia took a nosedive. Today's barriers might be technical in nature, but content is king, and Google is a pauper in that regard. That's a longer-term challenge they'll find much harder to crack.

Sadly in 2029 I predict I'll find myself – begrudgingly – subscribing to multiple services from Sony, Ubisoft, EA, Microsoft and maybe some eclectic platform specialising in indies or retro titles. And grumbling how much more I'm spending on gaming compared to 2019.

Ivan Harding

Sorry for the irony, but you just won a PS Plus subscription. Yes, it's hard to see a blockbuster being on Stadia on day one without either developer or consumer feeling short-changed. Perhaps the industry's reliance on day-one sales is about to end? One thing's for sure: things are about to get very interesting. ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

Ezra Winterhand wakes up in an *Animal Crossing*-style cabin, and a friendly floating sprite tells him it's time to go to his first class at the Academy. I've named my blonde-haired wizard in honour of the poet Ezra Pound, and the sprite walks me through the process of battling monsters by casting spells. In order to cast a spell, I have to solve a maths problem. Easy! The first monster, like all the subsequent ones, is not very threatening, and his weapon of choice is a spell called Fungi Fling, which literally consists of throwing a mushroom at me. Knowing how to do simple sums, I easily beat him and get some battle stars; a chest opens and sprays gold coins at me. Yay, riches! On to class.

Unfortunately an evil Puppet Master has broken in to the Academy and dispersed a bunch of special crystals, so I'm going to have to go on a fetch quest to various different environments. Sure, why not? I choose a land floating prettily in the clouds, and the first guy I talk to is the Merchant. "Want to see what I have for sale?" he asks. This must be a chance to spend some of those gold coins I earned, so I agree and go into his shop. All kinds of cool stuff is here. I click on a funky-looking baseball cap, but it turns out I can't buy it with mere gold. "Become a member today!" a splash screen says. "Get a parent to help." Wait, what? I click around some more, getting the same screen each time, until it becomes clear I can't buy any of this stuff in the shop with the gold coins the game has given me.

"Members get amazing things!" the game keeps promising, though. "Cool new styles! Rescue more pets! Awesome gear! Level faster! More gold!" That does sound cool. "Please ask your parent or guardian for help to become a member," the game advises. Ah yes. The 'help' I need is, of course, money: not the imaginary cold coins with which the game is so liberal, but cold hard dollars. It's ten minutes into the game and I have been advertised at.



It's hard to agree that children should be advertised at during the time they are supposed to be learning

This is the experience a child has playing the highly successful 'free-to-play' maths game called *Prodigy*, which has been eagerly installed by teachers in schools all over North America and currently counts five million monthly users. The field of 'edutainment' is growing by billions in revenue, but at what cost? It's hard to agree that children should be advertised at during the time they are supposed to be learning; we would not expect paid product-placement to occur in their textbooks. A few years ago, a study by the University Of Bath called for stricter rules on 'advergames' that promoted

sugary drinks and fast food to children. *Prodigy* is only advertising itself, but the way it does it nonetheless might look amoral.

For what you sign up to, when creating a parent's account for a child, is not just for your child to be advertised at, but for the company to bombard you with emotional blackmail. "Ready to empower your child?" reads one such spam. "Become a Premium Member." Not many parents would be willing to say they weren't ready to empower their child. "Give your child an edge in math with a Premium Membership," they promise. Wait, so paying for hats will actually help them solve puzzles faster? Actually, no: or, at least, not according to Steve Bergen, the game's director of product, who told the sceptical journalist Jeff Wise that the bonus items available with membership "don't make you any stronger; they just make you look, maybe, cooler. The education content is not locked." In which case, why does the game email parents promising that if they pay, their child will get an educational edge?

To be fair, *Prodigy*'s business model is perfectly logical – rapacious, but logically so – when shrinking school budgets occur in an age when we have become used to free online services that are paid for behind the scenes by feeding our privacy to advertisers; and where podcast hosts, ostensibly pioneers of an independent new medium, increasingly read out adverts in their own voices, thus endorsing commercial claims about some product that have been written for them by someone else, and undermining their own authority as independent thinkers. In games as elsewhere, the wall between advertising and everything else has become increasingly permeable, and sometimes it's hard to know where it is at all. Ironically, the villain's sidekick in *Prodigy* could be talking about adverts when he warns: "The less you learn, the stronger our Mind Illusions get." Is this the world we want children to grow up in?

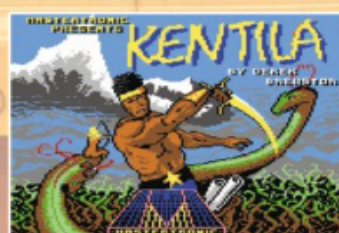
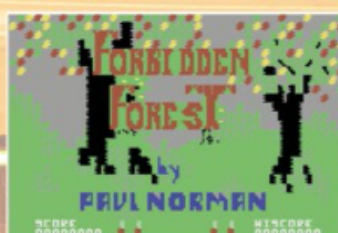
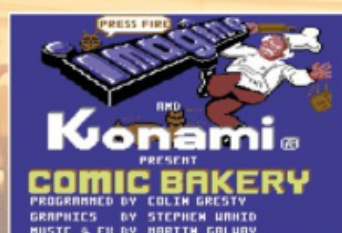
Steven Poole's *Trigger Happy 2.0* is now available from Amazon. Visit him online at www.stevenpoole.net

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NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

Like many of my generation, I used to DJ a bit. If you were a club kid of a certain age in the 1990s, chances are you either knew how to mix two bits of vinyl together, or knew someone who did. I was one of the former and knew plenty of the latter, and while it obviously never went anywhere – I abandoned my dream of packed main rooms for a career on the game-journo breadline – it’s something I’ll always love, and always be able to do. There are a few skills in life that, once acquired, will never leave us (an ollie on a skateboard; nappy changes; a few flashy but woefully suboptimal Ken combos in *Super Street Fighter IV*), and matching beats is certainly one of them.

I happened across a couple of old mixtapes recently, and once I’d found an actual CD player, stuck them on. They hold up surprisingly well, I think, but were further confirmation that I’ve become what I used to hate. They weren’t just a trip down memory lane for me; they were also concrete proof that the tunes were so much better back then, man, and you really had to work so much harder with vinyl and yeah, you kids have no idea what you’re doing. I used to hate those guys, or at least most of them (the older folks in your own personal raver circle were always heroes, regaling the new recruits with outlandish tales of old). But now I *am* them: every so often I dip into the New UK House playlist on Spotify, and tut like your dad picking you up from your first teenage party. What’s that racket? It’s just noise. Then we peel away in the Volvo listening to an embarrassingly loud old LTJ Bukem set. Man, I can’t wait until my kids grow up.

Luckily my job precludes me from holding a similar attitude when it comes to videogames. But the ethos of the grumpy old house-music dad pervades the game industry, particularly when something new and dangerous-sounding comes along. It certainly happened at GDC, when Google finally unveiled Stadia, and gamer grandads immediately started moaning about latency,



Google unveiled Stadia and gamer grandads immediately started moaning about latency and all the rest of it

bandwidth, ownership, configuration, privacy, and all the rest of it.

All those things are genuine concerns, certainly. I’ve written on this page before about my struggle to reliably pass a WiFi connection through the thick old walls of the converted farmhouse I live in, and so I am yet to be convinced that Google can really get a 4K HDR stream in here at 60fps with minimal latency. Your mum, out in the sticks with her 2MB ADSL line, should probably hold onto her *Sekiro* disc for now, though I hear she’s still stuck on the title screen. And yes, Google’s history of killing off things that

don’t quite work out means that maybe Stadia is not something you should go all-in on from the word go.

But christ, when did we all get so bloody grumpy about it? I don’t think ‘old man yells at cloud’ was originally intended to be taken quite so literally, but here we are. There’s tremendous promise in Stadia and its ilk. And while there’s always been an element of this grandaddish resentment in games, it’s getting worse. I’m reminded of when Wii was revealed, when it was just a live-action video showing all the possible uses of the Remote. I remember forums being alive with... not speculation, per se; it was more a kind of ad-hoc design meeting, where people were coming up with ideas for the thing, beguiled by the potential of it all. Yes, that was Nintendo, this is Google, and in hindsight the Wii catalogue was 98 per cent bobbins, so there’s absolutely room for a little more suspicion. But cloud gaming, and much of the Stadia pitch, isn’t *supposed* to appeal to people with every current console under the TV and a beefy PC in the back bedroom. Wii was designed for your parents. EDM was never meant to get hips shaking among the deep-house crew. Stadia is for my mate Dave, who hasn’t owned a gaming system for 20 years but quite fancies the new *Doom*. There are use cases for the likes of us, sure – full-fat gaming on any screen, anywhere, is a dizzying prospect. But I’m not sure we’re really Stadia’s target market, and that’s fine.

Clearly we’re living in a more cynical age, and there’s a whole other column or six to be written about how The Discourse has convinced people that everything is dreadful, and every company is out to get them. But as the masthead I read a dozen times a day makes clear, videogames are about the future. If the past is all you’re interested in, maybe it’s time you packed the turntables away into the loft, and stopped going out raving. It’s beginning to look a little weird.

Nathan Brown is Edge’s editor. He stuck those old mixtapes of his up on Mixcloud, if you’re somehow that bored

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ALEX HUTCHINSON

Hold To Reset

Building a new game, a new studio and a new life from the ground up

On the third day of our four-day demopalooza at GDC, the email came in from Kotaku: had the team considered the implications of using the word 'savage' in our game's title? At this point we'd been running demos for the press who were attending the conference, and livestreaming demos to others who couldn't make it, from 7.45am to around 6pm each day. It was a gruelling schedule by any standards, but we'd found a rhythm and we thought we were doing a good job of demonstrating what we thought was original, interesting and potentially fun about the game.

It's a crucial time for us, especially since most people will only look at your game once, and so that first communication from their favourite outlet is crucial. It sets the expectations for your game and creates an environment where you can keep trying to coax players into investing their time, or has you written off almost immediately.

Our communication goals for *Savage Planet* at GDC were pretty simple. To highlight that we're a small team and it's not a full-priced game; to emphasise that it's upbeat and colourful and about exploring an alien world for a dubious corporate overlord; and to hammer home that it's satire. Attempting to create an interactive comedy is exciting for me, as I've explained previously. But it's also dangerous, because as in any game, you are the primary author of the action, so the player feels more ownership of what's going on on screen, as opposed to merely empathising with it.

Obviously we would love every article about the game to be glowingly positive, but I have no problem with critique so long as it's based on arguments we are making or content that exists in the game. The biggest disaster is to fail to communicate clearly, or to encourage a criticism that isn't actually evident in the work itself. And while at the end of the day, it will be the players who judge what it means, as well as what's true or not, we need to at least state our



Most people will only look at the game once, and so that communication from their favourite outlet is crucial

position to put it on the record before the game itself is available.

So here we were. Were we witnessing the test balloon for the 'Are Typhoon secret racists?' story pitch? Or had we been oblivious to our unconscious biases? If we answered directly we risked sounding petulant and argumentative. If we downplayed it, then we might sound as though we don't take issues like this seriously. If we pointed out that we were using it as an adjective rather than a noun, then we sound nitpicky and as though we're glossing over a serious issue. And if we don't answer at all then we're just assholes.

I understand the nature of a journalist's job, and I know a bit of controversy earns more clicks than a simple preview, but it felt like a reach. I chose the name based on the retro adventure of the movie *Forbidden Planet*, with the 'journey' part giving the player some indication that it was an adventure and exploration game, and as a nod to one of my favourite games of yesteryear, *Ultima: Savage Empire*.

That said, words exist in context, and with only a few screenshots and a 30-second video floating about, it's understandably hard for onlookers to see the full context of the game. For us, knowing that there aren't any bipeds, let alone indigenous cultures, to meet, the question came from left field. In fact, if anything, the game leans into the idea of the coloniser as the seed of destruction (albeit in an environmental sense) rather than promoting or glamourising a colonial past.

It's almost impossible to get any nuance into a short demo, especially in a hotel room next to a hectic conference with a revolving door of time-starved journalists. And it's even harder to do it when the game isn't finished. You try to highlight the fact that the game is a satire, but that it does have an opinion and will hopefully resonate with players who take a moment to think about it, but we're also still making content. In that context even I am not 100 per cent certain how far we'll be able to get by the time it's done, and you don't want to overpromise.

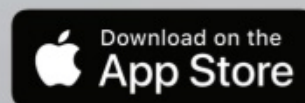
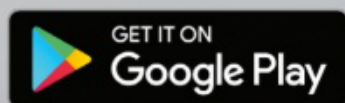
This news item also broke in the same week that *Assassin's Creed III* was released in remastered form. Our Native American hero, the use of indigenous languages for several long stretches in the game, the positioning of our narrative as caught between the British Empire and the American colonies as opposed to taking one side over another, have all been appreciated far more in 2019 than they were in 2012. It shows that all we can do is finish the game and let everyone decide how they feel.

Alex Hutchinson is co-founder of Montreal-based Typhoon Studios. He can be found on Twitter at @BangBangClick



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THE GAMES IN OUR SIGHTS THIS MONTH

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54 **Cyber Shadow**
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Explore the iPad
edition of Edge for
extra Hype content

Form and function

Numbers are certainly important – just ask the marketing department at Gearbox, who were no doubt doing cartwheels when they were told that the newly announced *Borderlands 3* contains over a billion guns. Having lots of potential options is all well and good. But this month's Hype crop takes a different tack: these are games that like the idea of having a few tools that are capable of multiple remarkable things.

That's a core design principle in *Journey To The Savage Planet* (p48), as regular readers of creative director Alex Hutchinson's **Edge** column will already know. Its toolbox contains tools that have one obvious function, and others that only become apparent through experimentation – and typically result in riotous slapstick comedy, empowered by the designer but generated by the player.

We find a similar ethos in *Void Bastards* (p40), and in particular a weapon, the Rifter, that doesn't kill the thing you point it at, but absorb it, the next trigger pull spitting it out. Sentry turrets can be moved between rooms; troublesome enemies are deleted from the game entirely and stowed in your

inventory (until all your other guns run out of ammo, anyway). Multifunctional tools of this nature let us feel like we're changing the rules of the game, and feel smart for having seemingly outwitted the designer, even if it's what they planned for us all along.

Yet we are not about to second guess 151A, the Swedish studio behind this month's most surprising game, which knows more about its subject matter than we do. On the face of it *Hexagroove* (p44) is just another rhythm game, albeit one with pedigree (one of its makers worked at Inis on such genre classics as *Gitaroo Man*). But this is so much more than another note chart, a game about gaining a deeper understanding of the structure and patterns of electronic music, and what moves a dancefloor. Rarely has the word Hype felt so appropriate.

MOST WANTED

Super Meat Boy Forever

Android, iOS, PC, PS4, Switch, Xbox One
Originally due in April, the team behind Meat Boy's return has opted against sacrificing "minds, bodies and social lives" and will instead complete the game at a "sustainable" pace. No complaints.

Cadence Of Hyrule Switch

A crossover between *Crypt Of The Necrodancer* and *The Legend Of Zelda* is an irresistible concept, and while we're a little wary about the notion of chiptune remixes of *Zelda* classics, the developer has earned the benefit of the doubt. *Zelda*'s actually playable, too.

Judgment PS4

The western release for this *Yakuza* detective spin-off looked under threat after a member of its cast was arrested for drug possession – a mark of shame in Japan that saw the game removed from sale while a replacement was sought. All's well, however, and we'll be back in Kamurocho as scheduled in June.

H | Y
P | E

DIVINITY: FALLEN HEROES

How the Original Sin II follow-up is
blending RPGs with XCOM

Developer	Larian Studios, Logic Artists
Publisher	Larian Studios
Format	PC
Origin	Belgium, Denmark
Release	TBA

Larian Studios has been making *Divinity* RPGs for nearly two decades, since the tautologically titled *Divine Divinity* in 2002 up to its most recent instalment, the celebrated *Divinity: Original Sin II*. With *Fallen Heroes*, though, it's hopping the fence into tactics games. But as producer **Kieron Kelly** points out, "the crossover of RPG, strategy and tactics is actually quite high". He's talking specifically about the games that Larian's team like to play – alongside the RPGs you'd expect, he rattles off a list of tactics and strategy games: *XCOM*, *Into The Breach*, *Darkest Dungeon*, *Heroes Of Might & Magic* – but it applies to the building blocks of those genres. Turn-based combat, squad selection and skill trees are common refrains, they're just turned higher or lower in the mix depending on the genre.

"A lot of *Original Sin II*'s combat was trying to make it as tactical as possible anyway, only in the RPG setting," Kelly says. "So all we're doing is condensing that into a more refined, tighter experience." *Fallen Heroes* is tightly linked to its predecessor, in a lot of ways. While over 1,000 years passed between the first and second *Original Sin* games, this story picks up just two years later from one of *OSII*'s multiple endings. "This game is not *Original Sin III*, it's very much a spin-off, but it is using a canon ending of *OSII* and building a story from there," says Kelly. Under said canon, the magical Source has left the world and all of the

'origins' – *OSII*'s term for the pre-rolled characters who could either be your playable protagonist or members of your wider party – survived the events of the game.

The game casts you as the captain of the Lady Vengeance, a flying ship first glimpsed in *OSII*, staffed with a crew made up of those familiar faces. We get our hands on Ifan, Lohse and Fane, but all six 'origins' will be available to recruit, as well as Malady – who appeared in the last game as an NPC – and one as-yet-unnamed character.

On board the ship, you'll have conversations with each character and make decisions that guide the flow of the story. Larian is crafting over 60 missions, but one playthrough will see less than half of those, depending on the path you choose. This is all very much the stuff of RPGs, although the structure is intended to be a lot more concentrated, offering a half-hour loop of mission and story rather than the lengthy sessions needed to advance the plot of something like *OSII*.

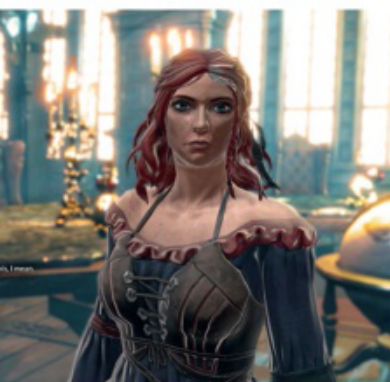
Those missions themselves will be immediately recognisable to anyone who has played Larian's previous games. Characters have the same magic and physical armour protecting their health bar. Each unit has a pool of action points, which if unspent will be carried over to the next round. Levels feature various surfaces with environmental effects: ►

Abilities will be taken from a pool of over 200, most adapted from *OSII*. But the skill sets of heroes will be limited to around ten to encourage units working together





DIVINITY: FALLEN HEROES



fire can melt ice into water that can be electrified to shock an enemy, and so on. In truth, the version we play could almost be an *OSII* mod – because that’s essentially what it is right now.

These are still early days for *Fallen Heroes*. Larian has been working on the game – Kelly uses the word “experimenting” – for six months, together with Logic Artists, a Danish developer best known for the historical tactics series *Expeditions*. It was less than two months ago that Larian played a build Logic had sent over and decided it was going to proceed with the game. That was the version before the one we’re playing, and Kelly repeatedly emphasises that this is a prototype, with a lot of its assets borrowed directly from *OSII* and a hacked-together UI that’s roughly halfway between that game and *Expeditions: Vikings*.

This only serves to highlight the aforementioned similarities in the combat

Each mission comes with objectives that go beyond ‘win the fight, get back to the story’

system. The difference is that each mission comes with objectives that go beyond ‘win the fight, get back to the story’ – one tasks us with destroying three ballistae that are firing on the Lady Vengeance, for example. *OSII*’s D&D-style initiative queue has also been ditched, in favour of the full-team turns that are more usual in a tactics game.

This is a small change, but one that’s intended to open up the possibility space for combinations and synergies. Larian wants to push interactions between abilities and environment to the forefront even more than in *OSII*, Kelly tells us. Which is a good decision, because it’s in these interactions that *Fallen Heroes* really comes alive. The game has added a new elemental surface, the kinetic Sulfurium, and along with it a physics engine. When Sulfurium gets hit, anything on top of it will be blasted away – meaning units can be sent tumbling across the level. Combine this with characters’ skills and you get brilliant moments of emergent silliness. You can walk a unit onto Sulfurium then use Nether Swap to

switch places with an enemy, setting them up for a nearby archer to loose a well-aimed arrow. A metamorph character can use their ability to grow magical horns, then bull-rush a line of units to knock them back onto the surface and trigger an explosion.

Because your squad all act simultaneously, rather than waiting for their place in the initiative queue, it should be easier to set up and execute these kinds of combos. And there’s more room for on-the-fly experimentation, because you’re building a tailored squad for each mission. You can control between four and six units, with one hero character plus a handful of basic units and, once you meet them in the story, named veteran troops with unique power sets. You’ll likely be forced to explore every combination, because – as the title hints – permadeath is one trope of tactics games that Larian has embraced fully. Basic units will regenerate endlessly – there’s always another archer or healer – but heroes and veterans can be lost forever. “A lot of your decision-making and choices in character composition will be, ‘Who do I bring on missions and why?’” says Kelly. “As you lose troops, it’s not so much that you lose power so much as options. It’s like losing a limb, rather than your heart.”

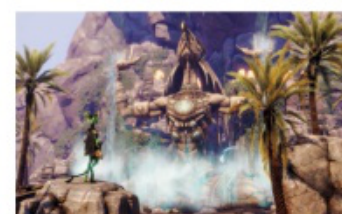
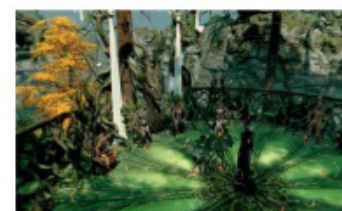
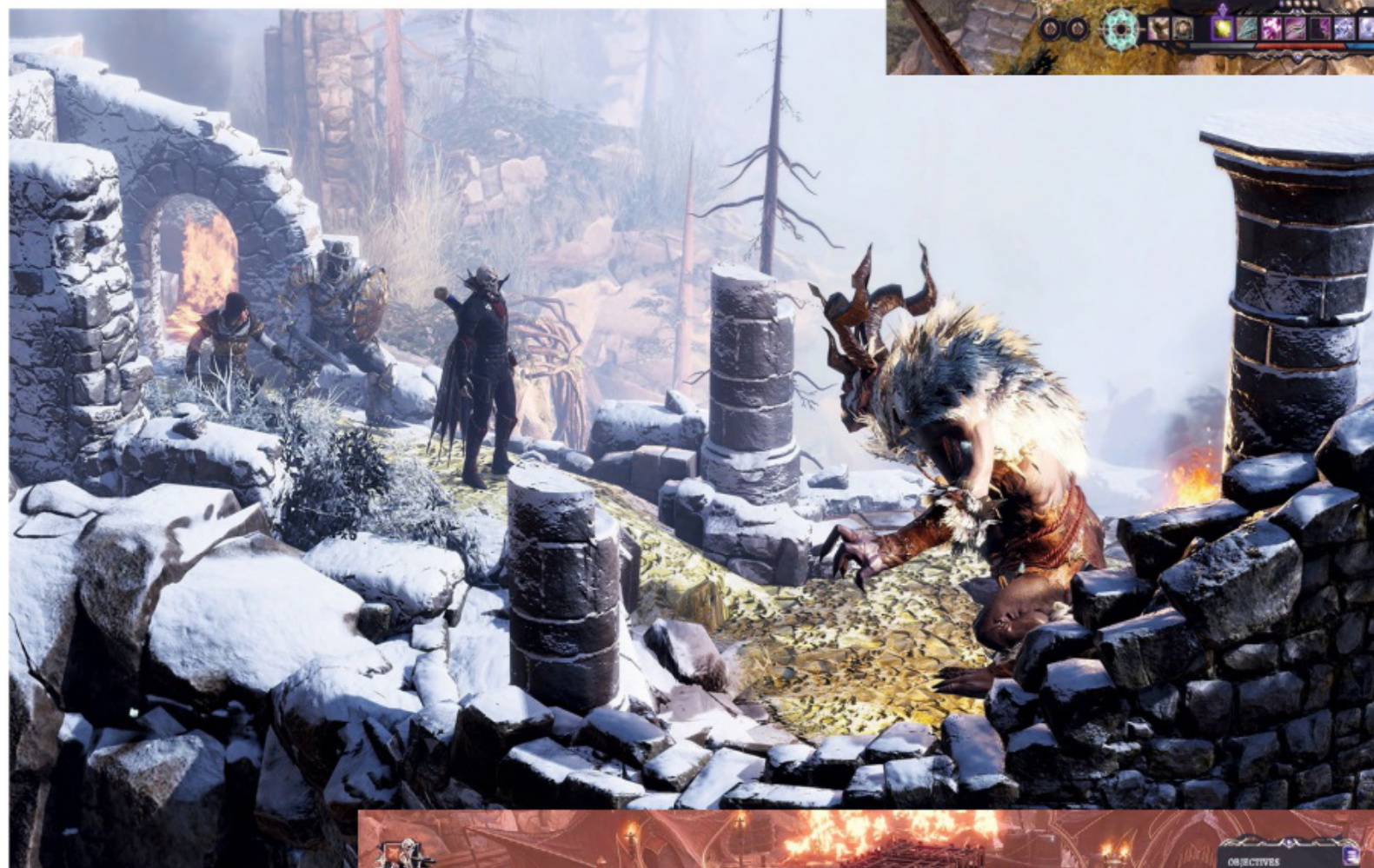
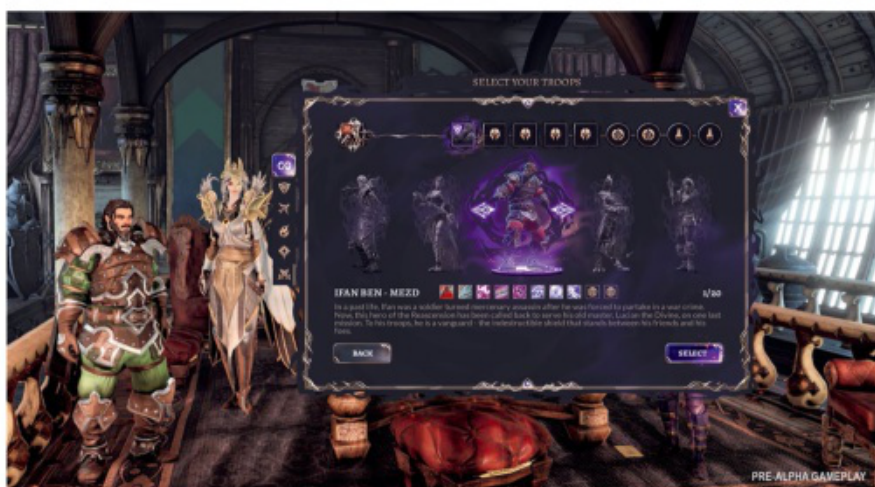
Larian is keen to avoid the ‘death spiral’ of games like *XCOM*, where too many failures mean you should probably abandon a run entirely and start again. The *Divinity* universe does offer a solution to death, in its resurrection scrolls, but Larian is still undecided whether these will carry across to *Fallen Heroes* – after all, with the Source drained from the world, it makes sense that miracles would be in shorter supply.

The most likely option, Kelly says, is that the player will have just a couple of chances to resurrect one of their fallen heroes, to give as much weight to bringing someone back as to losing them. It’s a very RPG solution, emphasising narrative as much as systems, and one example of how an outsider perspective can bring fresh approaches. As *Fallen Heroes* continues to grow away from its roots, it’s this kind of cross-pollination that should help Larian and *Divinity* find its own space between two well-established genres. ■



Fall together

Like the *Original Sin* games, *Fallen Heroes* is playable in co-op – albeit capped to two players rather than *OSII*’s four. In combat, this will mean picking a hero each and splitting the rest of the squad, then simultaneously setting orders. But both players will also have a say in how the story unfolds. “It won’t be just one person taking care of the narrative,” says Kelly. “You will both be able to talk to the various characters, so you’ll be playing politics on the ship against each other – or with each other, depending on how much you want to actually cooperate. But if you have different opinions on how you should proceed, that will be reflected in the relationships you have and the missions you play.”



TOP As well as selecting units for each mission, you'll be able to pick from a selection of consumable items to take into battle – including the cowbell, with its powers of bovine transmogrification. RIGHT As in *Original Sin II*, bloody surfaces can be electrified, frozen or – for some reason – exploded if set on fire. We're going to assume the people of Rivellon would struggle to pass a breathalyzer test

TOP Blowing up Sulfurium surfaces isn't just a source of slapstick hilarity; it's also an effective way of dispatching multiple enemies at once, especially if you can get them close to a ledge. ABOVE Among the new locations you can expect to visit during the campaign are the Lizard Ancient Empire and Elven Forest. MAIN The epidermically-challenged fellow on the left is Fane. Once recruited, he'll tinker with the Lady Vengeance so the ship can offer aerial support



Sometimes it really is just best to cut your losses and run for the exit. When you've been on the Internet as long as we have, though, it's hard not to take the fedora a bit personally



H | Y
P | E

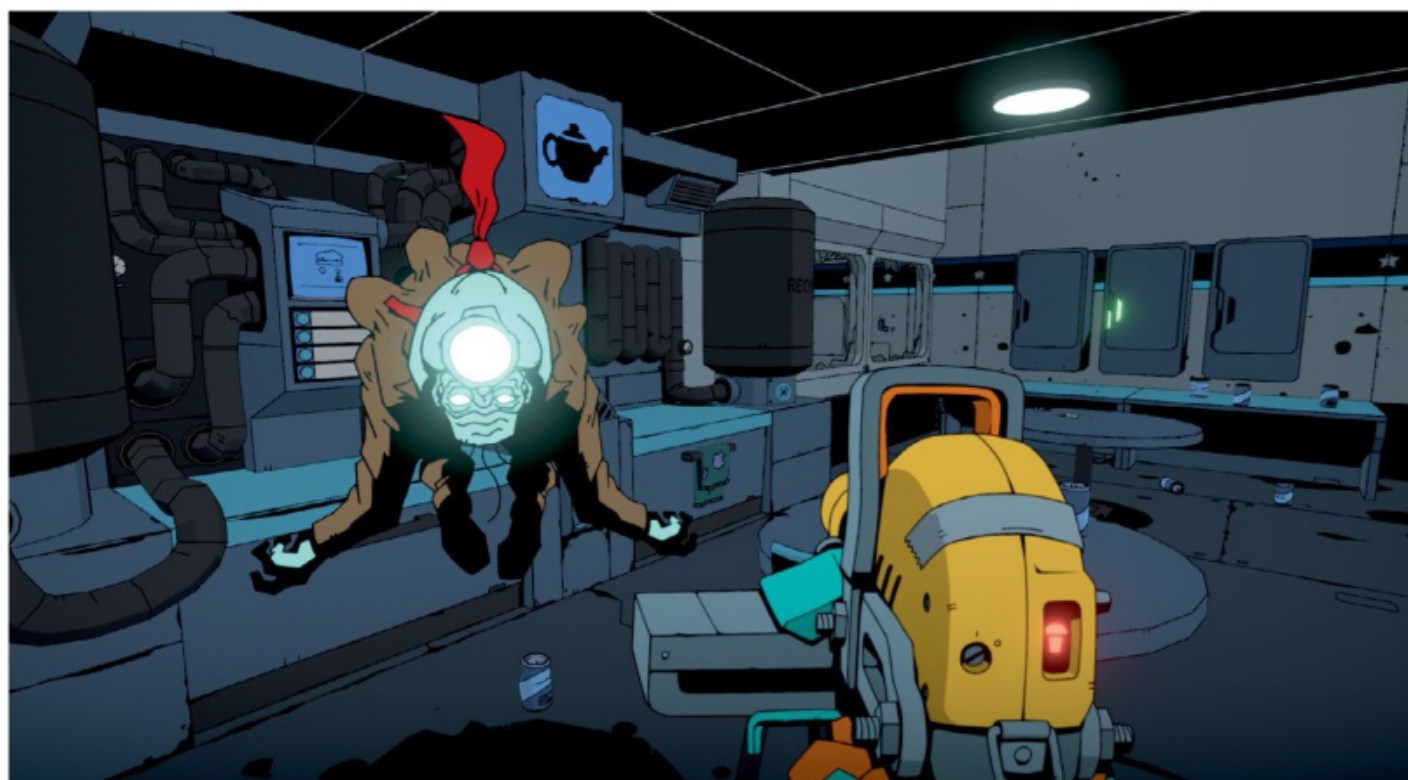
VOID BASTARDS

Get smart or die trying in this pulpy,
punishing strategy FPS

Developer	Blue Manchu
Publisher	Humble Bundle
Format	PC, Xbox One
Origin	Australia
Release	2019



TOP Bring back loot to your workbench to craft new, very non-threatening-sounding kit including a Stapler, a Toaster and a Kittybot. ABOVE You can pause the action by switching to the map view, allowing for a breather and a tactical rethink



TOP The shooting feels a little imprecise, but a generous array of creative effects accounts for a little of the stickiness. ABOVE This guy's tie is doing a lovely impression of the exclaim from *Metal Gear Solid*: indeed, stealth will get you far in this game. LEFT There's no stamina meter to worry about, but you will make more noise and attract more enemies while sprinting. We don't suppose it matters if you take an enthusiastic approach to explosions, though



VOID BASTARDS

We really should not have pulled the trigger. The sight of a fedora will do that to a person, though – especially when it’s sported by a radioactive ghoul. A panicked cycle through our weapons leaves us with a Rifter in hand, which we don’t notice until it’s too late. Instead of bullets, this gun rematerialises previously sucked-up enemies, and firing it now suddenly answers an age-old question. What’s the only thing worse than one murderous fedora? Two of them.

That’s this *Void Bastards* run likely finished, then, all thanks to our itchy trigger finger. This is a game in which you really must think before you shoot, both in an immediate sense (of trying not to accidentally make things worse by, say, unleashing a gunful of the last enemy to get in your way) and a much broader one. Entry to a randomly generated, *FTL*-esque 3D level – or, more accurately, ship – depends on successful navigation of the star map. As a hardened space crim, you must calculate a safe path out of the Sargasso Nebula using whatever you can scavenge along the way.

Food and fuel are your basic means of travelling between wrecks, and how much of it you’ve gathered will factor into your decision about where to explore next. Deeper in the nebula, more dangerous ships offer greater rewards; the best runs through *Void Bastards*’ skies see pilots dipping up and down through the strata, chancing their arm at a big, risky play for supplies and loot before smoothly escaping back to a less treacherous layer of space to make use of the reward. The resources inside each unique ship, alongside a canny approach to securing them, are key to making it out of the nebula in style.

Although *Void Bastards* is already working its socks off to ensure that. Art director Ben Lee’s love of vintage sci-fi graphic novels pays off handsomely, vibrant cel-shaded shapes exploding off the screen with the help of glowing action lines and onomatopoeic speech bubbles. But while the art style might be audacious, it’s the less obvious details that truly excite. The slow but ever-dwindling oxygen meter, for instance, adds urgency (and

is sometimes cause for a hasty rerouting to pass a refill station). Our enemies’ ability to detect hurried footsteps means it’s often counterproductive to sprint for the exit when under attack, lest our noise causes another nasty to pop its head round the corner we’re planning to escape via. Then there are the quirks we’ve been endowed with, one of which causes our character to occasionally cough loudly enough to give away our position to enemies. Fortunately our Rifter comes in handy, not just able to pick up and relocate turrets safely into locked rooms but also perfectly capable of solving a monster-shaped problem by trapping it inside the gun without ever releasing it. Theoretically.

A poke around one ship reveals a special DNA pod in which we can add or remove certain traits – so long, Smoker. Meanwhile, it’s worth pushing onwards towards the map

Vibrant cel-shaded shapes explode off the screen with the help of glowing action lines

room of this ship despite the dwindling ammo supply in our preferred projectile-focused gun (a pleasantly hefty pistol that fires three shots at once) to study the plans and reveal the locations of every single piece of loot on board. We make a beeline for the biggest reward: a piece of kit that, when used at our workbench after completing the mission, will allow us to craft a deployable robo-cat capable of distracting patrolling foes.

That is, provided we get back to the airlock without dying. But devoid of ammo, grenades and poison darts, when another ghoul appears in a menacing swirl of trenchcoat, our idiotic recourse is to pull out our Rifter and *fire another one at it*. One sprint to the exit later and we’ve somehow dodged a game-decimating death. Provided you can somehow make it out alive with your loot and the last vestiges of your intellectual ego intact, then, *Void Bastards* promises rich tactical intrigue to players who use their heads – and some gut-bustingly silly close calls to those who momentarily lose theirs. ■



Shock revelation

There’s more than a suggestion of *System Shock* about *Void Bastards*, and little wonder: the team making it is headed up by Jonathan Chey, co-founder of Irrational Games. Chey worked on 2K’s *XCOM* firstperson shooter (which later released after his departure as *The Bureau*) and has been fascinated with the idea ever since. Browser-based Flash game *Card Hunter*, however, was to be his new studio Blue Manchu’s very first project. It wasn’t until later that his team revisited the strategy FPS idea in earnest, but it’s been in development for quite some time now – to the point where friend of the show and *BioShock* creator Ken Levine has already sunk tens of hours into it.

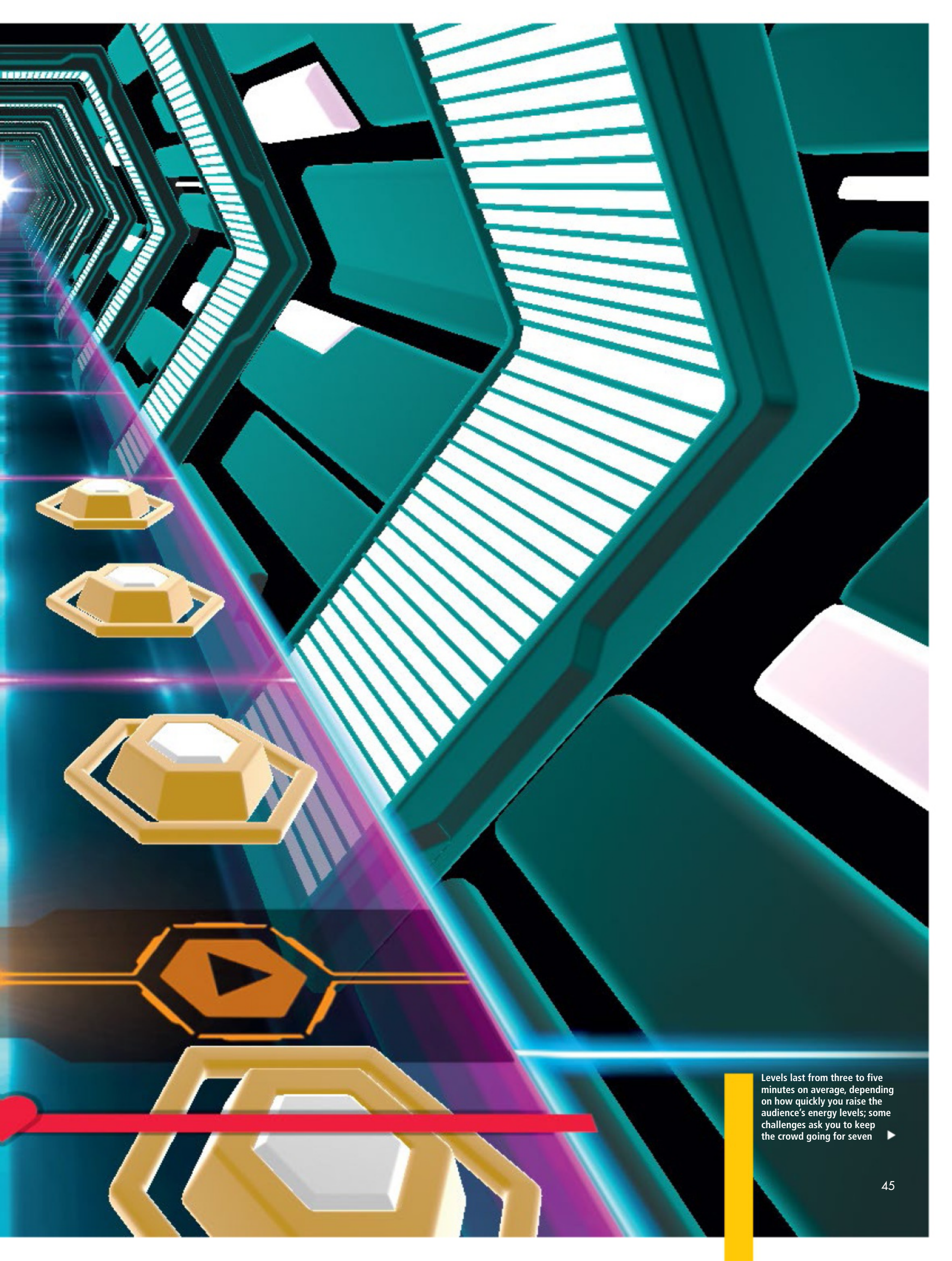


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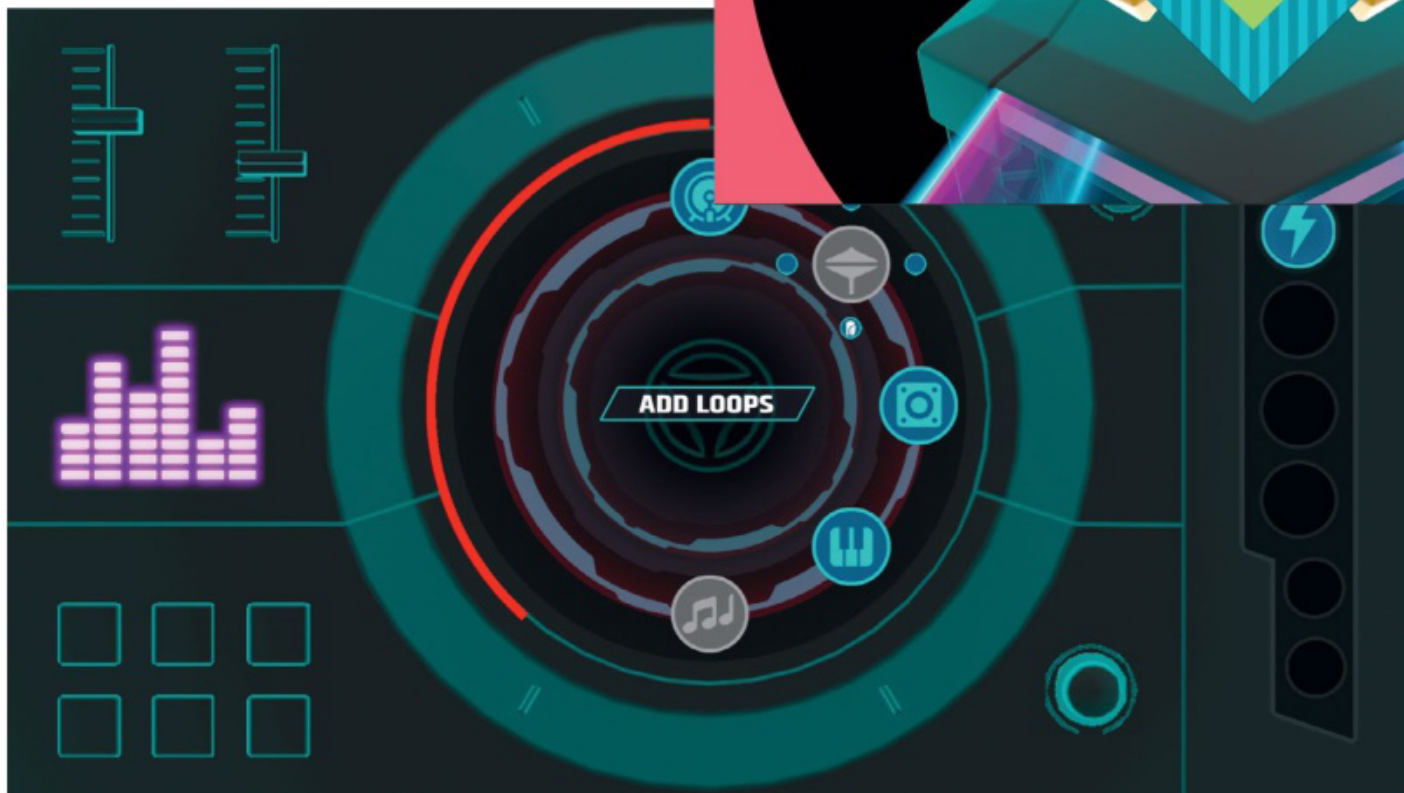
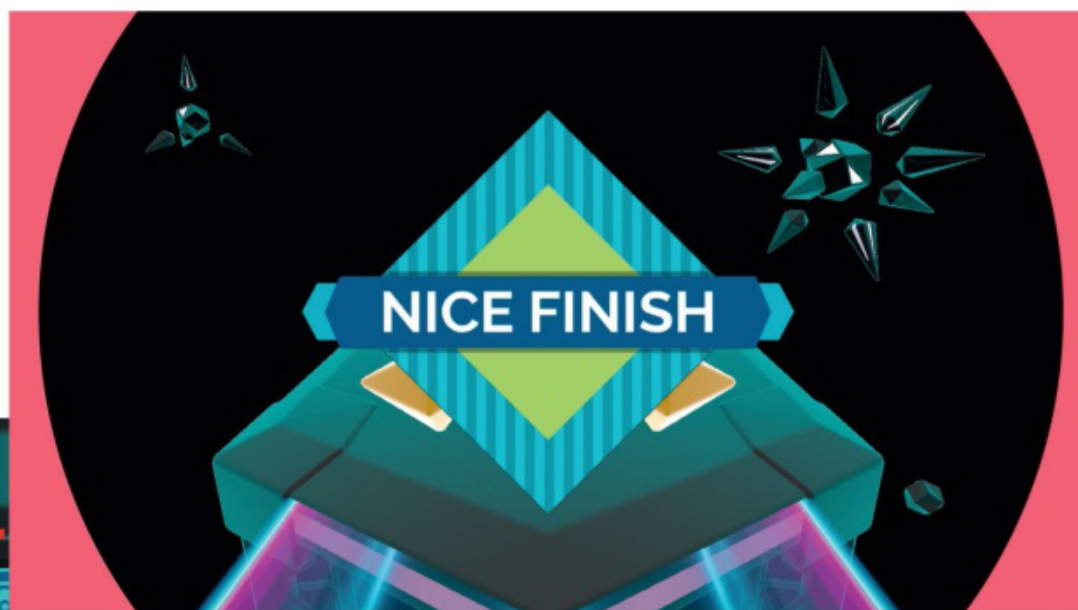
HEXAGROOVE

The technical mind behind Gitaroo Man returns to test a new musical theory

Developer/publisher	151A
Format	PC, Switch
Origin	Sweden
Release	October

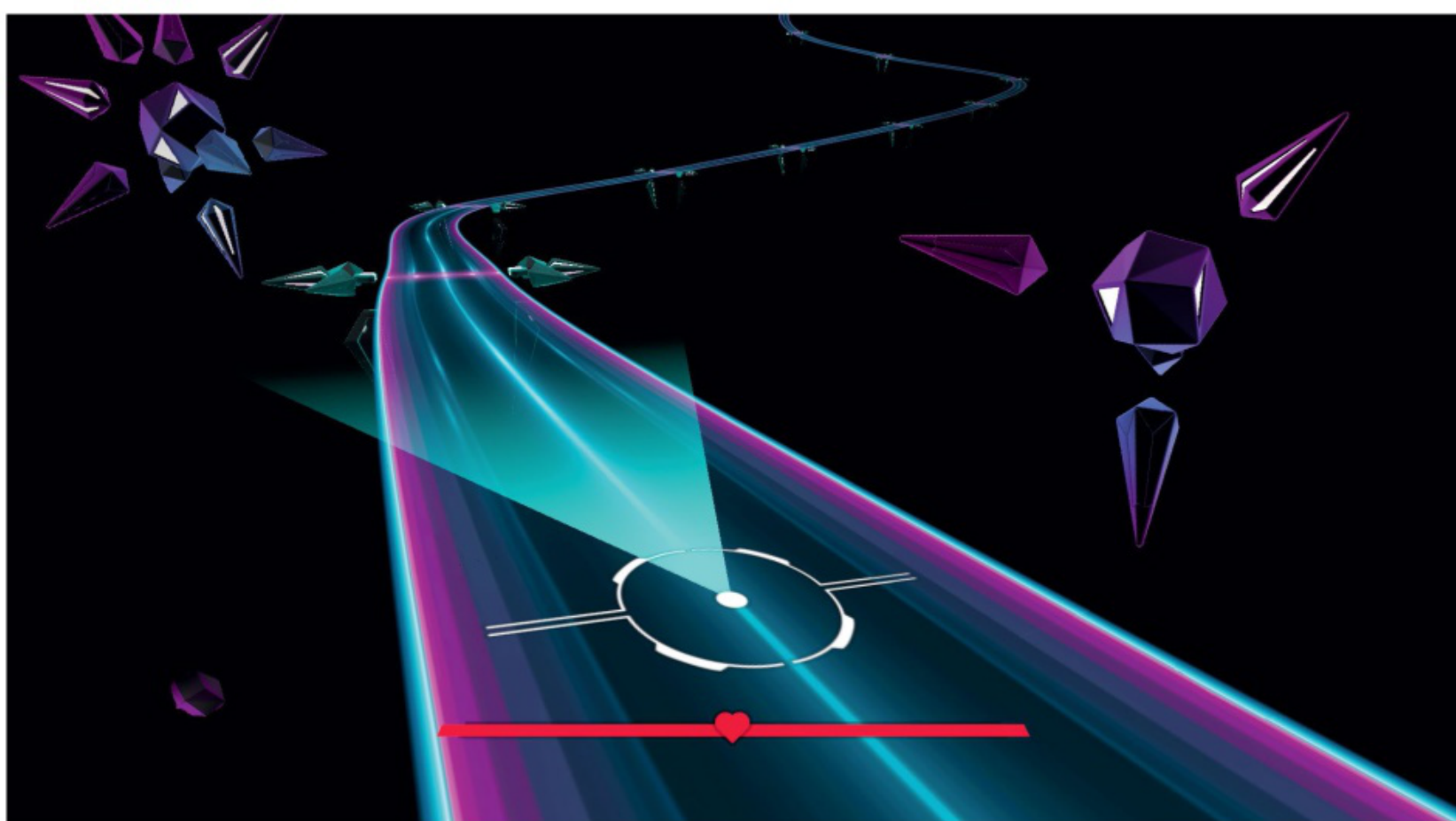


Levels last from three to five minutes on average, depending on how quickly you raise the audience's energy levels; some challenges ask you to keep the crowd going for seven ▶



TOP Tricks will bag you bonus points. Ventura describes the action as "Amplitude meets *Top Skater*". ABOVE Our demo's score screen always displays our 'style' total as 420. We raise an eyebrow. "Okay, maybe it's hard-coded right now!"

TOP The visuals are still very much under construction: the final game will see a much less generic audience, and club lights that react to your performance on the decks. ABOVE The bullet-time mode is a welcome reprieve when the audience starts to get bored of multiple parts of our mix. We're in the clear here, for now: circular samples are still fresh. RIGHT *Gitaroo Man*'s influence is most clearly felt in this fast-paced minigame: you must angle yourself correctly to hit the beats





HEXAGROOVE

Music is half-art, half-science: as such, it's an excellent basis for a videogame. But while the rhythm games of the past have been mostly concerned with the latter half of the equation, demanding precise adherence to patterns with little room for deviation, *Hexagroove* understands that bending the rules can occasionally make a lovely noise.

It's the debut game from 151A (styled as Ichigoichie, a Japanese idiom meaning "one chance in a lifetime"), a new studio staffed by industry vets with over 20 years' experience creating rhythm games. **David Ventura** is one of them: having worked on the technical side of cult hits such as *Elite Beat Agents* and *Gitaroo Man*, he's taking the reins as creative director here. *Hexagroove* is intended to be as much a performance tool as it is a game, letting you loose on over 420 instrumental loops across ten genres – only some of which we suspect are fictional – including electro, techno, drum and bass, trance, synthwave and future funk.

We're currently getting to grips with psytrance, as well as the curiously RTS-like elements of *Hexagroove*. A successful club night depends on controlling a track's flow, and by extension the crowd, as the all-powerful DJ. We've got a maximum of eight instruments to play: selecting one brings up a choice of four different samples (which can be pre-selected from your collection before level start), each mapped to a different button. If we want to get our audience moving, we'll have to have to drop the bassline into the mix at just the right moment – although this is less a case of hitting something on beat than on bar.

The fourth bar, to be precise, which lights up an encouraging green. "We synchronise it so it starts at the right time," Ventura says. 151A is more concerned with theory than dexterity. "Our goal is to allow people to be creative and to express themselves, but we don't make that the story from the offset," he explains. "We're secretly teaching you something along the way while you're working with these rules." Introduce a new sample into the master loop during the fourth bar, then, and *Hexagroove* will boost

your score as an acknowledgement of your keen sense for the development of a track.

We layer in various chords and lead melodies. Every so often, a certain sample will morph from a circular shape into a hexagonal one – a sign that it's outstayed its welcome with the crowd, forcing us to switch things up. Fortunately, we've built up enough goodwill to trigger bullet-time, in which we can quickly rearrange multiple elements to freshen up the mix for the next section of the song: they're prefaced by a variety of minigames, including one involving tapping out a drumroll and a 3D take on *Gitaroo Man* where we must trace the trails of notes in a melody.

"We look at all the different loops and when you're changing them, and whether it's high-energy or low-energy affects how tired the crowd get," Ventura says. Change up a motif too soon, and they'll become irritated;

It's as much a performance tool as it is a game, letting you loose on over 420 loops

if it's too short, they'll get bored. During the breakdown, we know to let them recoup their energy, with *Hexagroove* offering us a reduced choice of instruments. "We're teaching people that different sections require different energy levels," Ventura says. "So it's a game about blending elements of calm, contemplative strategic thinking – and having frenetic, frantic moments in between the sections where you're doing minigames."

Tricks add an extra facet of skill, asking for fast fingers, certain harmonic combos or perfect timing and granting a bonus when satisfied. There are more points to be had, too, through improvisation: one-shot samples that can be triggered multiple times – although our experimental mashing of one doesn't go down well. "Not that fast!" Ventura laughs. "If you overdo the improvisation, you totally piss off the audience." Proof, perhaps, that you can't put a numerical score on true art – or more likely, that *Hexagroove* still has much to teach us when it comes to the science of music. ■



Party people

Hexagroove asks players to build a song based on the AI audience's reaction and rates them based on six separate categories as well as a style modifier, teaching players about the beats of a good electronic track. The build-up, the breakdown, the drop: the idea is for people to understand how to craft parts of a song that take listeners on a journey. It's a fresh approach to the rhythm genre, something we're seeing an influx of lately. "I guess people are just getting sick of the pure tapping," Ventura says. "They're looking for something else. Combining genres, using the music in an action-oriented fashion, things like that."

H | Y
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JOURNEY TO THE SAVAGE PLANET

Typhoon's Technicolor debut
puts the 'punch' in 'punchline'

Developer	Typhoon Studios
Publisher	505 Games
Format	PC, PS4, Xbox One
Origin	Canada
Release	2020

We have a good idea of what to expect from *Journey To The Savage Planet* — and you probably do, too. Creative director **Alex Hutchinson** regularly vents his spleen about his new studio's debut game in his monthly **Edge** column (p32); as such, we're familiar with much of the theory behind it. *Savage Planet* is a rare case of a creator having shown us their workings before showing us the result. It's to its credit, then, that it still manages to surprise us.

First, there's the general philosophy of it all. This may be Typhoon's debut, with plenty riding on its success, but Hutchinson isn't about to let that dictate his approach. A firstperson adventure game with a focus on exploration and comedy, *Savage Planet* casts you as an employee of Kindred Aerospace, sent to an alien planet to check if it's habitable for humans. With your journal in hand, it's your job to scan and log every rock, tree and beast you possibly can — meaning everything is bespoke. "It's a very unfashionable game," Hutchinson says. "It's not infinite. It's quite short. We want you to finish it. And you pay money for it, and you can keep it forever."

These are radical concepts for 2019: risky, even. "I think it's very dangerous in the modern market to make games that you can spoil on Twitch," he says. "People feel like they've had their fill, and why would they pay for it? The more interesting narrative is the player's

narrative, the story they're telling themselves, anyway. I'm getting tired of games that make bad TV shows and put them inside videogames; TV shows are hard enough to make on their own, let alone when you can press buttons. Letting people toy with the environment and do what they want is more fun."

It's early days yet, but *Savage Planet* is showing all the signs of a thoughtfully constructed comedic sandbox. It's structured much like a *Metroidvania*, with a whiff of the immersive sim: you pick your way through the wilderness, poking at plants and scanning rocks partly out of a sense of duty, partly out of curiosity (your AI assistant provides jaunty commentary on notable discoveries) and partly in hopes of finding a blueprint for a tool that will help you reach new areas. Use the visor to scan a particular breed of vine sprouting from a nearby floating rock, for instance, and your robo-assistant will spin up a blueprint for a grapple. It's then added to your journal as a quest, and the key crafting ingredient's location highlighted in the world. "It's our attempt to sort of split the difference between true open-world and a guided experience," Hutchinson explains. "How to get there and what's in the way, it's up to you to figure out."

With its pulsing, psychedelic locale, and a soundscape that rivals the Amazon rainforests for cacophony, the eponymous planet proves itself more than capable of getting in the

Savage Planet sets up
jabs at capitalism, with
deliciously ridiculous full-
motion video ads playing
inside your 'Javelin' base





JOURNEY TO THE SAVAGE PLANET

way of your objective – and with raucous enthusiasm to boot. A light puzzle involving a spiky growth that blocks the path ahead involves feeding the sentient maw attached to it. A canister of ‘grob’ (a versatile food substitute) lures a flock of rotund alien birds closer to the hungry plant. It gobbles them up with gusto, before retracting, satisfied. It’s a gently ridiculous scene: we wonder if there’s another way to solve the puzzle. This one was only recently added into the demo, we’re told, but the idea is that most scenarios in *Savage Planet* will have more than one solution – and a greater propensity to surprise and delight different people in different ways. “It’s like the inverse of a *Dark Souls* game, where you have to like, beat your head against it and figure out the one way to get through the puzzle,” Hutchinson says.

In another area, a terrified Venus-flytrap-like plant will only open up to offer resources when you take out all the threats around it.

The idea is that most scenarios in Savage Planet will have more than one solution

“We really don’t want it to be a shooter, as much as possible, because all the other stuff is more interesting,” he says. We’re tempted to beg to differ when we see what your upgraded gun can do. Charge it once, and your shot simply becomes more powerful – but charge it a second time, and you’re able to launch a projectile that pinballs seemingly endlessly around a group of predatory enemies. But it’s the tools in your left hand that Typhoon is keen to push you towards, things such as grob and a fruit-inspired explosive called a ‘pomgrenade’ that can deal damage or even propel you around. They’ll start out as limited-use items, but you’ll be able to find upgrades to make them part of your permanent toolkit.

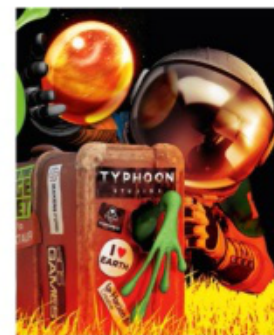
Of course, the slapstick sim that *Savage Planet* aims to be means you won’t always need them to cause tactical mischief. The cave hiding the coveted grapple-crafting material is guarded by a gigantic eyeball creature, a kind of cross between a security camera and mortar impervious to gunfire. You’ll have to slide between cover to avoid its glare –

Hutchinson’s work on *Far Cry 4* suddenly makes itself apparent – until you’re in close enough to give the eye a theatrically squelchy poke. It collapses in on itself, revealing the cave’s entrance and a short platforming puzzle before you can grab your prize.

Head back to your ship (which plays host to blaringly funny live-action ads for Kindred Aerospace’s products) and its 3D printer, and a grapple upgrade is yours. The grapple perhaps makes Typhoon’s goals for *Savage Planet* clearest: not only can you use it to swing across gaps and reach higher places, but you can also employ it to wrench creatures towards you before comboing it with a kick to send them sailing into next week, almost purely for comedic effect. “We’re trying to get that extra layer onto everything,” Hutchinson says. “We had some foreign press in, and the Chinese players who maybe weren’t as fluent in English were still laughing at the humour in the game, which was really encouraging. They weren’t going to laugh necessarily at the TV ads that were super-fast, but they’d laugh at all the slapstick comedy.”

Indeed, what’s truly enticing about this planet has nothing to do with words, but everything to do with language: the knowledge that if you call into the wild, there’ll be a response, although what that might be is unknown. If the environment is designed to physically trip you up at some points, it’s also happy to delay you in less literal ways, hiding things to tempt you to stray from the beaten path and insinuating all manner of japes if you do. “We used to joke at Ubi that hidden content was wasted content, because players wouldn’t find it, but this game we’re going the other way where most of the content is hidden,” Hutchinson laughs. “So if we do it right, you go towards the marker, and you’re like, you know what? Before I go there I’m going to go and have a look in this weird cave I passed.

“For me,” he continues, “it’s a bit of the feeling of the besmirched *Zelda*, *Zelda II*. There was something in that magic of you finding it. ‘I wonder if there’s something up on that cliff?’ And it’s there! That’s super-satisfying. So that’s what we’re working on at the moment, making sure that when you spend time, you’ll always find something cool – and that all the encounters are just as surprising.” ■



Double act

If we have one reservation about *Journey To The Savage Planet*, it’s this: it’s a lonely old world out there. Perhaps it’s in keeping with your role as a solo adventurer, stranded from civilisation with only the ads for company. But what’s the use of telling a joke when no one’s around to hear it? The local fauna certainly doesn’t appear to see the funny side of being booted into carnivorous flora, and the only NPC available for comment is basically a fancy version of Siri. “There are some features that we’re not allowed to talk about just yet,” Hutchinson says. “I’m dying to answer your question but I shouldn’t.” Eagle-eyed readers of his column, however, might have an idea of what we might see at this year’s E3.



TOP It's an odd, beautiful world: characterful shots such as this have us dreaming of a photo mode. LEFT Creatures have life cycles, and seek out food. Our main sustenance is a kind of floor-goo that refills health and ups stamina. Thanks for that, Typhoon. ABOVE Shooting is your main method of interacting with wildlife (you can also pick up passive creatures), but the team may add more non-violent approaches. BOTTOM The grapple is one way to get around – but after you've discovered areas, you can fast-travel back to them via teleporters



CARTO

Redefine the edges of the world in this small, subversive adventure

Sunhead Games has solved fetch quests. Yes, there's pleasure to be had in finding the correct object needed to complete a task, or delight an expectant NPC. But having to schlep across an entire map between point A and point B can be dull. Not so in *Carto*: we can bring the destinations to us. Each tile of the map can be selected, rotated and moved both to solve puzzles and for convenience's sake. When faced with a long walk to deliver an item, we realise we can cut out the middle land – a few short button presses later, and our goal is now in the very next square over.

It's a dazzlingly simple little thing, subversive and utterly joyous. The same could be said of *Carto* as a whole. It hails from an unassuming dev team from Taiwan, and while undeniably pretty – watercolour washes of green with blades of grass picked out in tiny brushstrokes, bobble-headed characters boiling kettles in cosy huts – it's minimal, almost to the point of being plain. This is a game about a wide world that can be reconfigured at will, and so naturally there are only so many defining features it can

The process of disassembling and reassembling the map is elegant and uncomplicated

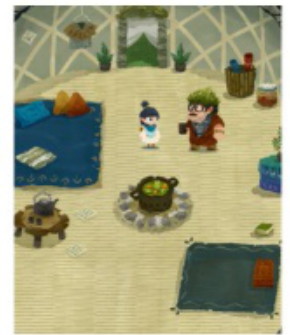
really have before it becomes too detailed to function. Still, at the beginning, with just a handful of empty fields to wander, it's easy to underestimate *Carto* somewhat.

The process of disassembling and reassembling the map is elegant and uncomplicated. Hit a button and you'll zoom out from exploration mode to the tiled map view, where you'll also be shown any new map pieces you've collected on your trails that you can add to the world. Like environments fit together: the pale green grass of the meadows, the deeper viridian of the forests, the various pieces of a large lake. A solely meadow or forest piece will need to be attached to the

side of another to lock into place (your island world must be a continuous whole, so there's no brute-forcing the ocean in between chunks of land) but some tiles contain multiple land types and serve as transition pieces.

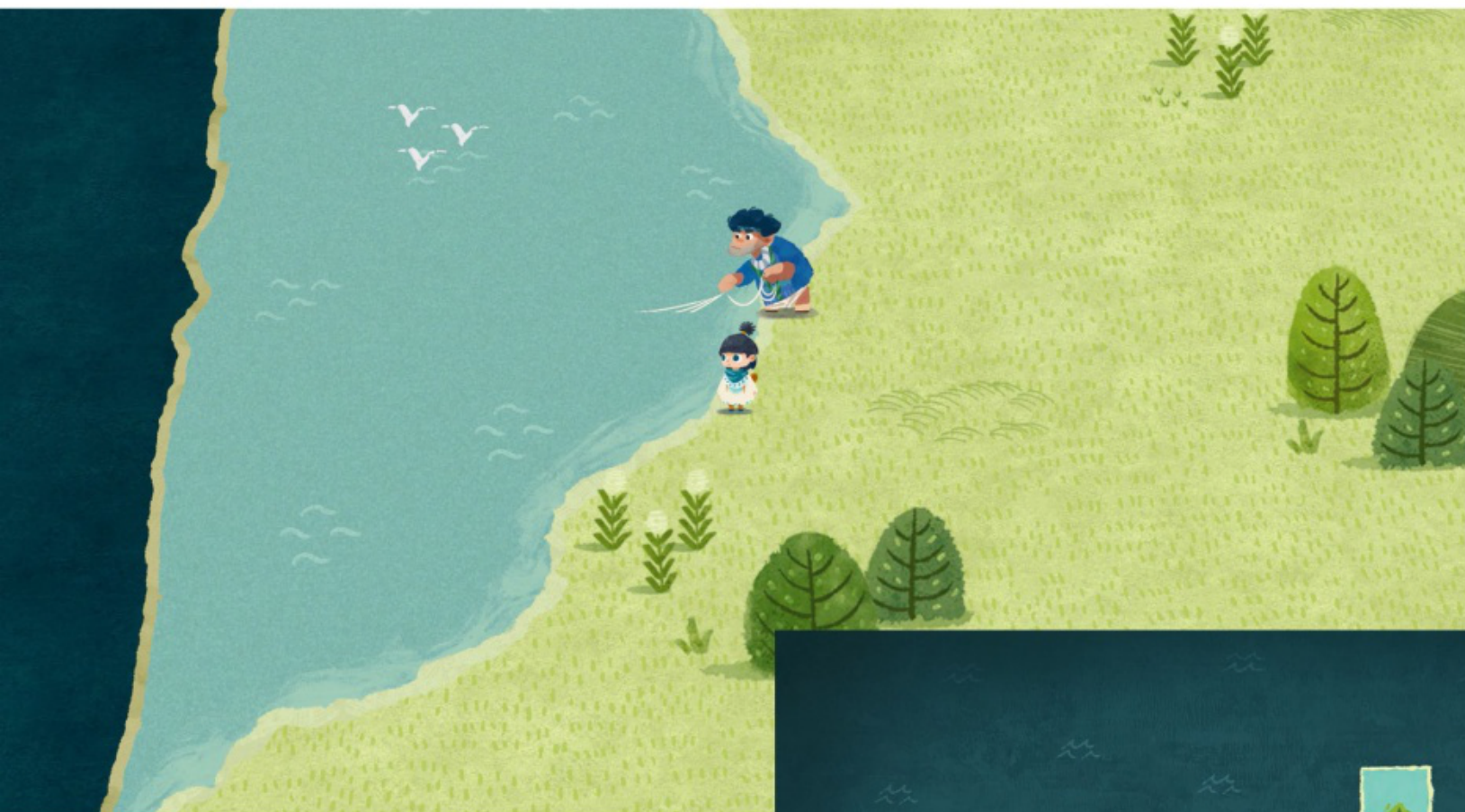
A new configuration involves some thought, then, especially when you start meeting *Carto*'s amiable cast of characters. If the island can feel a little bare at first, it soon fills out when you meet the locals. They're expressively realised and written – including a highly accurate depiction of a cheeky toddler – as are the requests they make of you. An early puzzle we're faced with has a forgetful elderly man asking us to help him find his way back to his house. He was sure it was somewhere to the east, by the sea. After we find the piece matching his description, rotate it and attach it to the right side of our island, his hut pops into existence. Later, as our map grows in size and complexity, we meet a young girl who's due to leave the island as part of her coming-of-age ceremony. She's after a commemorative handful of soil from a square of the island that contains grass, the forest and the coast; we plonk the tile containing our character adjacent to our destination and mosey over to collect the requested material. And afterwards, it's easy enough to move the ceremony location nearer, so that we don't have to backtrack through the entire forest.

There's a charming scene as the teenager prepares to leave the island on her adventure – our own character looks to be not far from the same age, in fact. *Carto*'s writing sparkles already in even mundane interactions, but there's plenty of narrative intrigue in the potential parallels in the game's central mechanic of a young adventurer rearranging their world in order to explore and expand it. *Carto*'s cheerful two-dimensional island is showing all the signs of something rather more sophisticated, then. In any case, we're not sure how we're going to go back to regular videogame fetch quests after this refreshing approach to cross-country travel. ■



Atlas obscura

You're able to expand and further explore the island by collecting more map tiles, glowing white and scattered about the world. While plenty are simply found on the ground in new tiles, some are more difficult to track down. We spend a little longer trying to find our first truly hidden one: we're not sure how to complete a puzzle, until some subtle NPC dialogue suggests we might find an answer inside a nearby house. We eventually spot something sparkling among a wall garland, which turns out to be the piece of map we need. There's a danger that such hunts might frustrate if the objective is not made clear – still, it's more fun than the aforementioned basic linear collecting.



LEFT Coming across the edge of the world is actually quite an unsettling experience. BELOW The map view makes reassembling things simple. Red edges indicate when two world tiles won't fit together properly



ABOVE NPCs are a delight to interact with. Some will impart funny anecdotes, while others need your help with puzzle-like tasks. RIGHT The island's tribes have their own traditions and customs you'll learn about as you explore





ROUND-UP

BORDERLANDS 3

Developer Gearbox Software **Publisher** 2K Games **Format** PC, PS4, Xbox One **Origin** US **Release** 2019



A much-teased PAX East livestream was not, it's fair to say, the coming-out party Randy Pitchford and his team at Gearbox were hoping for. Technical problems first saw the trailer for the 4K *Borderlands* remaster – available as you read this – play at such a low framerate you'd think it was running on a toaster. Then the same happened for *Borderlands 3*'s grand unveiling. Even in slideshow form, it looks the business; in full flow, it appears marvellous. The setting has been expanded to multiple worlds; the arsenal has swelled to over a billion guns; and seemingly everything in the game either has a mech suit or a moustache. Winner.

STREETS OF RAGE 4

Developer Lizardcube, Guard Crush Games **Publisher** Dotemu **Format** TBA
Origin Canada, France **Release** TBA



Dotemu's retro-revival campaign continues apace with this eye-catching continuation of the classic Mega Drive series. There's a much greater sense of teamwork than before, the protagonists bouncing airborne opponents back and forth with some delightfully freeform juggle combos. Despite the updated artstyle, character models are immediately familiar – aside from Blaze, who's spent the past 25 years under the cosmetic surgeon's knife – and all that's missing is an announcement that Yuzo Koshiro's doing the soundtrack. Fingers crossed.

SOLAR ASH KINGDOM

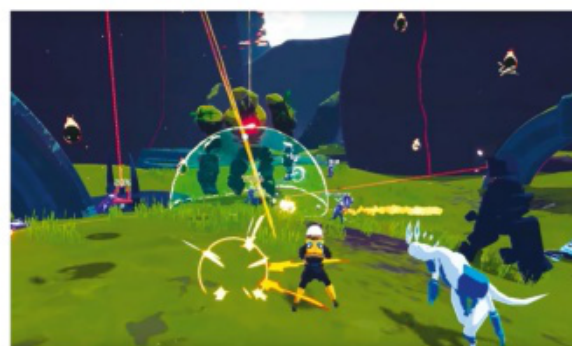
Developer Heart Machine **Publisher** Annapurna Interactive
Format US **Origin** PC **Release** TBA



The second release from the *Hyper Light Drifter* developer looks anything but sophomoric. Details are scant, but the teaser's display of an adventurer speed-skating down clouds and through a forest, before squaring up against a gigantic eye, is all the information we need. That, and the developer's pedigree, makes *Solar Ash Kingdom* already feel essential.

RISK OF RAIN 2

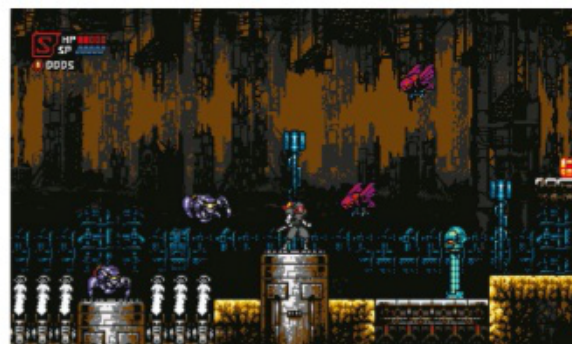
Developer Hopoo Games **Publisher** Gearbox Publishing
Format PC **Origin** US **Release** TBA



A surprise early-access launch for this sequel to 2013's co-op 2D Roguelike sees the action move into 3D, which makes the world of difference to a game that, mechanically, is only a gentle evolution of the formula. You now have to stay close to the end-of-level teleporter to activate it, giving boss battles a far quicker, and more dangerous, rhythm than before.

CYBER SHADOW

Developer Aarne Hunziker **Publisher** Yacht Club Games
Format PC, PS4, Switch, Xbox One **Origin** Finland **Release** TBA



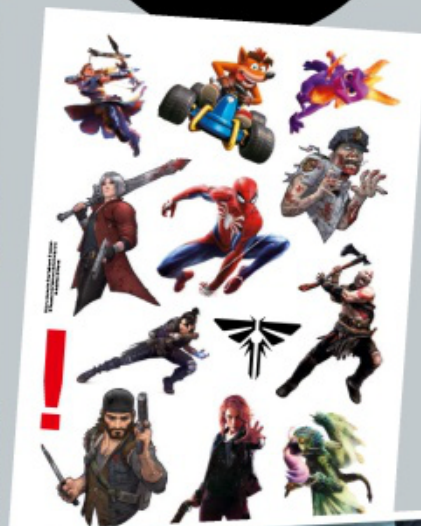
Shovel Knight developer Yacht Club Games turns publisher for this, a 2D platformer in similarly earnest 8bit style about a ninja out to save their clan from a robotic horde. Aarne 'MekaSkull' Hunziker has been working on the game for six years, and Yacht Club has been helping fine-tune level design.

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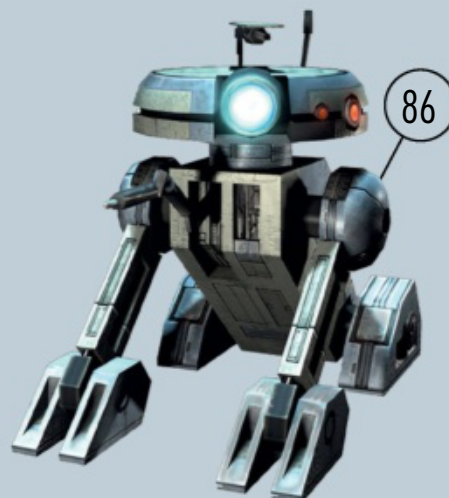
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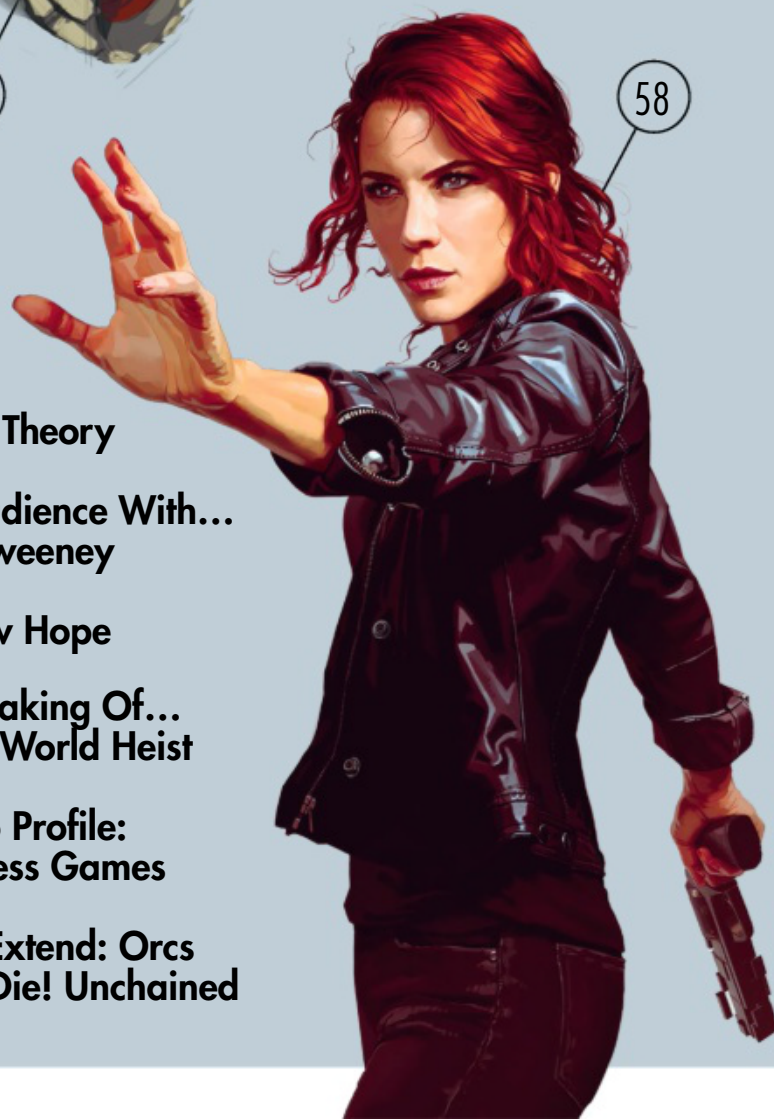
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S T R

T H E





Game *Control*
Developer Remedy Entertainment
Publisher 505 Games
Format PC, PS4, Xbox One
Release August 27

I N G
O R Y

After cutting ties with Microsoft, Remedy is back at the reins. Its transformative new game shows a studio in the process of redefining its future

BY JEN SIMPKINS



STRING THEORY





The Northlight engine can create gorgeous and unique things, such as visual effects that sync perfectly with soundscapes

Remedy is no stranger to a power struggle. Not to imply that its ten-year relationship with Microsoft was entirely imbalanced: the studio is keen to stress that the 2016 breakup was amicable and that both parties remain friends. The Xbox owner did take the kid, though, in the form of the publishing rights for *Quantum Break*. And while the partnership produced great things while it lasted, there were always concessions to be made.

Alan Wake sold well, for instance, but not well enough to convince its publisher to greenlight the full sequel that Remedy had been working on. *Quantum Break*, meanwhile, would almost certainly have been more successful were it not exclusive to the console that lost the generation war, and spliced with a mediocre television show as part of the publisher's vision of itself as a multimedia mogul.

It was time to reassess. **Tero Virtala** found himself at the heart of the process, first joining the studio as a consultant in the spring of 2016, just before the launch of *Quantum Break* and with the prospect of independence on the horizon – a fresh start. “We evaluated what was good, what should be developed, and what should be the future direction of the studio,”



he says, referring to a select group of key players at the studio. “We had a huge talent pool already back then: 130 people capable of creating really unique, standout games. But clearly something was not in order – how was it possible, with this amount of talent, that creating a new game always took four, five, six years?”

Delays are an inevitability in most earnest creative endeavours. But it was clear that there was something structurally amiss with the way things had worked up until now. Remedy had been growing at a rapid pace over the past decade, and not much had really scaled well enough to accommodate it. *Max Payne*, for instance, was made by just 25 people; *Alan Wake*, 50. “Games of that size don’t require that clear organisation, and it’s not so important if the roles and responsibilities are exactly defined,” Virtala says. “But with *Quantum Break*, Remedy grew to over 100 people.” The studio’s foundational culture of placing a high amount of trust in its creators, when combined with the sheer number of employees and the indistinct structuring of its teams, had created problems. “All of a sudden, it ends up too many compromises are being made. And when there is a difficult decision to be made, you invite all of these people around you to try to find the consensus – and you can’t.”

With an understanding of where Remedy needed to develop – a more efficient structure and workflow ►



Enemies' powers will progress just as Faden's do, providing an equal challenge. The Hiss don't seem too sophisticated in our early demo, though: there are no air-to-air fights to speak of, for instance

to increase its output, and a diversified portfolio of projects to create more opportunities internally to help retain talent – Virtala agreed to become Remedy's new CEO, and begin implementing change. Now, the studio has gone from working on one single six-year game at a time to being a truly multi-project operation. "No matter if it's individual people, game teams, organisations or even societies, history defines a lot of who we are," Virtala says. "We could see at Remedy that people were experienced enough to see that some things did not work as well as they would have liked them to work. But they didn't have answers, because that was the way they had always operated. So it's always good when an outsider comes in – there is always a certain honeymoon period in which you can question things."

It's almost poetic. Jesse Faden throws out a hand towards a chunk of concrete, which shudders and rises into the air: we release, and it hurtles towards an enemy, obliterating over their form. Suffice it to say that the new director of the Federal Bureau Of Control is the hands-on type. Remedy's latest casts you as the newest employee of a secret government agency that researches supernatural phenomena – and successor to its greatest position of power. Faden, the 'chosen one' trope personified, has been dropped in at the deep end: the agency's headquarters has been overrun by a dark force called the Hiss, and she must wrest back control of the situation. "It's about Jesse earning the role, in a way," game director **Mikael Kasurinen** says. "And there's also a sense, being an old boys' club, that the Bureau has been run in a certain way for ages. Jesse is a bit of a breath of fresh air." The situation at Remedy might not be as chaotic, and Virtala does not (at least to our knowledge) possess the ability to chuck bits of building about with his mind. All the same, the parallels are irresistible.

And in our defence, *Control*'s artists do appear to be inviting the comparison. The Brutalist architecture of

the in-game headquarters, great geometric stretches of concrete, steel and glass, echoes Remedy's own monolithic building in Espoo, Finland. But the visual identity of *The Oldest House* is more than just an ingrained preference for modern design: it's indicative of the Bureau's inclination to put an ordered front on internal chaos. "There's definitely a desire for the Bureau to portray that things are under control," Kasurinen says. "But then when you start digging into it, exploring and finding secret areas, you will see that that might not always be the case."

Remedy has always been adept at this kind of storytelling, weaving art and allegory into strange, sophisticated narrative drama. But *Control* is pushing it one step further. While on the surface it may look typical for the studio, another linear thirdperson shooter, in reality it's anything but. Your journey through *The Oldest House* and your quest for order – like the paradoxically concrete walls of the building itself – is always shifting. The various areas can be explored in almost any order you choose, with Faden acquiring special abilities that allow her to progress in certain spaces, *Metroidvania*-style. It's a structural decision that ties neatly into the narrative themes of *Control*, and new ground for Remedy, which had always developed its games as predetermined movie scenes that the player would simply move through. "That's how we did things for almost 20 years," Kasurinen says. ▶



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Tero Virtala CEO

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"IT'S ABOUT JESSE EARNING THE

THE BUREAU HAS BEEN RUN IN

Mikaël Kasurinen game director



R O L E . A N D T H E R E ' S A S E N S E T H A T

A C E R T A I N W A Y F O R A G E S "



"T H E R E ' S D E F I N I T E L Y A

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M i k a e l K a s u r i n e n g a m e d i r e c t o r



With *Control*, however, Remedy was explicitly focused on building a game that could still surprise players upon repeated playthroughs. "When we looked at where the market is heading, a triple-A full-price experience that only provides approximately ten hours of gameplay, that's not going to be enough going into the future," Virtala says. "We need to provide more freedom for players gameplay-wise, we need to provide longer-lasting experiences." All told, it's quite an unromantic thing to hear from Remedy in an age where some big publishers are increasingly and publicly shunning one-shot singleplayer narrative games in favour of things of a more microtransactional nature.

But this is a studio clearly determined to do right by its workers as well as its history, to be as independent as possible while also being realistic. Part of that is observing the trends of the industry and player expectations, pushed higher and higher by the technological prowess, density of 'content' and longer runtimes of triple-A releases, and realigning its own strategy alongside it. "Remedy is a company that likes to try and innovate, but in a responsible way," communications director **Thomas Puha** says. "I mean, it's not like *Control* has the biggest budget in the world in terms of production nor marketing. We've never really had that. It's a nice thing we get compared to all the big studios and games out there. But the reality has always been quite different. We all play the *God Of Wars*, the *Destinys* – and you're like, 'Wow, that's what you get when you can throw 400 people and five years at something.' And that's never been the reality for us. The more important point is that we don't even want that to be the reality for us."

While direct competition for Remedy's deliberately non-blockbuster weirdness is on the low side, the studio recognises that it has to evolve into

new areas. 2017 saw Remedy launch an initial public offering to become a listed company on the NASDAQ First North Finland exchange. The studio, now 220 people strong, has been restructured into a series of smaller teams, moving away from all working on a single project and instead starting a variety of different ones. *Control* is one of them. But a second full-size production team at Remedy has also been developing the story modes for Korean company Smilegate's firstperson shooters *CrossFire HD* and *CrossFire 2*. Then there's the newly-formed Remedy Vanguard, a group of seven people (soon to be eight) experimenting with potential multiplayer and live games, with something in the very early phases of development. Remedy's own engine Northlight, created for *Quantum Break* and also being used to build *Control*, is an enterprise all of its own. Oh, and there's also one more unannounced project, on which yet another small team is working. "Transforming the company from a single-project organisation to a multi-project one has been underlying everything we have been doing in the past two years," Virtala says.

Not only does it make financial sense – ideally, Puha says, the studio want to ship something every year, whether it's a game, an expansion or something else – but it also ensures Remedy's people develop as much as its games, and that it retains talent. "If you only have one project, you already have the directors, you already have those big leads," Virtala says. "How do you move in your career to the next step when there are already people there who have been doing these things for ten or 15 years? But with the multi-project model, some people like to work on *Control*; some like to be on Vanguard, which is very different; some like to be doing the firstperson shooter. But it also provides the possibility that when one project ends, that we can have career discussions early: what's the direction in which you could go? Would you like to try a lead position now? And then there's another project where we have the position open."

The collaboration on the hugely successful *CrossFire*, of course, was simply a savvy business ►

ENGINE ROOM

Making one's own engine is a time-consuming and expensive pursuit, but it has its advantages. The Vanguard project is using Unreal Engine 4, but *Control* and the *CrossFire* projects run on Remedy's own Northlight. "A good internal engine makes the game shine, and stand out," Virtala says. "If we want a new innovation in the game, it's ten metres away where the programmers are. But there are the limitations: with Vanguard, when we're doing a game as a service, we know that we will be prototyping many different things and throwing them away – for that, Northlight is not the best." But with the demoscene origins of Remedy, and the Scandi scene as a whole, rolling your own tech is perhaps an inevitability. "We can roll out the clichés that it's really dark eight months out of the year," Puha says, "and you know, what else is there to do besides code and drink a lot?"



Control is set in the present day, but you'll see a lot of older technology still hanging around The Oldest House: the Bureau has found that the Hiss have a harder time tampering with it

"People see we've made *Alan Wake* and *Quantum Break*, and the assumption is we always want to be making games like that – that's not true. I've talked to Mikael a lot about over the years about how *Control* is a much more gameplay-driven sandbox, a systems-driven game, and how we want to be making more of those because we've kind of done the linear narrative thing to death, almost. It's not like we don't like that, but it's not like we always want to be doing the same thing."

***Control* and its** setting contain almost as many multitudes as its creator, a creation formed of interconnected, shifting spaces that reveal themselves only as far as you're willing to test them. We find ourselves on a hunt throughout the Central Research sector for Helen Marshall, who as the Bureau's head of operations should be able to furnish Faden with some information on how better to combat the Hiss. We're having to improvise plenty along the way, however. Hiss-corrupted Bureau workers float and shudder towards us, and so we make liberal use of Faden's powers.

Pressing a button to jump to a certain height and then holding the same button allows us to levitate (Faden is slightly unsteady in the air at this stage, but wonderfully will become more confident and assured as she settles into her new role). It takes a little getting used to: once we do, the rhythm of hold-and-release becomes second nature. Even in the air, we can fling rubble offensively or conjure it into protective shields, and send Faden diving into the ground to damage nearby enemies. She'll gain new abilities over the course of the main campaign by interacting with mysterious Objects Of Power: each power can be upgraded at plantable fast-travel beacons called 'control points', and further personalised in more granular ways via collectable character mods. ►



decision. But it was good for Remedy in more holistic ways, too. "You read some comments online like, 'Oh, they probably *have* to do this'," Puha says. "But the challenge was interesting: it's a firstperson shooter, it's with a Korean company so there's already huge cultural differences which have been challenging but interesting to solve, and then we were like, 'Well, *Modern Warfare* was really awesome – what could be a Remedy take on that?' A lot of us were really wanting to do that."

When it comes to business, then, Remedy is inclined to take some sensible cues from the success stories of the industry. "It's more on the creative side that we want to be different, and take risks," Virtala says. "But what we have seen with this multi-project model is that when we are able to give a small team enough time in the early phases to try out and see what the creative steps are, when we enter into production, it's actually not that high-risk any more. And we have definitely seen that creativity is at its best when it has some borders. That's what we have been trying to build in the early phases now." Puha adds:



Virtala (left) brought a wealth of experience and a new perspective to Remedy in 2016. Communications director Thomas Puha (below) previously worked at middleware firm Umbra Software



C O N T R O L I S A C R E A T I O N F O R M E D O F

T H A T R E V E A L T H E M S E L V E S O N L Y

T O T E S T T H E M



I N T E R C O N N E C T E D , S H I F T I N G S P A C E S

A S F A R A S Y O U ' R E W I L L I N G





Not all abilities are essential: they're your choice. Letting players change Faden's outfit was a tough decision for Remedy, too – yet another aspect where the studio is ceding control to players

Upgrades are paid for with a resource dropped by enemies, which you also use to heal. The lack of regenerative health means our survival depends on air control, movement and taking the initiative: the Hiss can often break through cover just as efficiently as Faden. Hunkering down often results in a swift death.

Fortunately, we have the Service Weapon. Calling it a gun would be reductive: a modern Excalibur, it's the thing that singles out Faden as the next director of the bureau, a mercurial assemblage of metal pieces which expands and contracts at rest, almost as if breathing. When prompted, it can rearrange itself into several different forms. And yes, if you're going to be boring about it, it also shoots bullets. (Er, we think.) You can have two different forms per loadout, switching between them for various situations. The Pierce form can penetrate cover – even multiple enemies if you manage to line them up just so – and deals substantially more damage per shot than the default form. It's slow to use, but equipping weapon mods to increase the rate of fire or reload speed can help to offset its disadvantages.

We've been gifted these in advance for the purposes of our demo, but they can usually only be found by exploring some of the most dangerous parts of The Oldest House, a place in which Remedy hopes

dream logic and an eye for patterns and clues will help players progress through *Control's* puzzle-esque rituals. It's a highly unconventional approach to puzzles, and potentially risky – there's a danger that designing for intuition instead of pure logic could prove too obtuse – but our dealings with early-game fare, at least, prove parsable. In our continued quest to find Marshall, we come across a gigantic spiky orb in one room, shimmering threateningly towards us: we must kite it around and funnel it into small corridors before finding the means of corralling it there. Some experimental prods of wall switches bring down the shutters on our abstract tormentor, trapping it. The orb, it transpires, has escaped from *Control's* Astral Plane – a white void containing a large inverted pyramid, a classified zone and the subject of the majority of the Bureau's research from which visitors come back fundamentally altered.

We fail to find Marshall, but we do come across an Object Of Power, which transports us to the Astral Plane and into a boss fight. Afterwards, we gain Seize, the ability to turn critically wounded enemies to our will – suddenly, with the prospect of a few AI helpers, exploring some thornier areas of The Oldest House begins to look more possible. And that perspective change is central to the themes of *Control*. "It's about creating a layered world," Kasurinen says. "Things might initially seem straightforward: there's a bureau investigating supernatural phenomena, and that's it. But when you start to dig deeper, you realise that there is more complexity to all of these things." In *Control*, things can be contradictory just as they can in the real world, he says, noting how Einstein and Newton had two very different ideas of how gravity works. The cat is both inside and outside the box, as it were. "It's part of trying to keep this world more complex. We don't want this game to look like a fantasy game: 'This spell is level one, I want to get level two'. It's static – a bit boring, even. In this world, people are speculating, they want to





understand how this works, and see how to apply maybe these powers in different ways. All of this is in an effort to create a world that is extraordinary, but feels real."

It's taken some doing, with Remedy having to reverse its usual process of starting with the story and then building a world and a game around it. "Before, we built these scenarios, almost like in movies, where we know exactly where the player is at any given time, what equipment they have, which enemies we want to use and where they appear like movie scenes. The problem is that they always happen exactly in the same way." Here, with a new AI engine and tools presenting a threat that can truly go toe-to-toe with the player – flying, breaking down cover, using the environment as a weapon – "It ensures that we can create situations that are unpredictable," Kasurinen says. "This is us letting go of controlling these type of things, letting the players choose." The word 'control' has a very literal meaning in this game, then, as players learn to master Faden's powers, the environment and the Hiss itself. "But there's also a psychological layer: being in control, losing control, or trying to take back control is an aspect that is a motivational factor to the character and the forces in

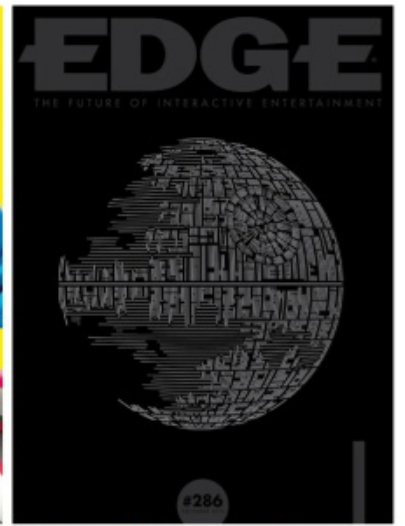
this world. Being in control means having power, it has meaning. And that's important."

The desire for control motivates many things. It's the reason why Remedy has been historically reticent to show and tell. "We tended to be a little bit too careful," Puha admits: now Remedy is making a game more heavily centred on action, it's had to demo earlier than ever. That has encouraged Remedy to restructure and diversify, with company-wide meetings every three weeks battling the growing pains by pulling together all its disparate teams into one unified whole. And it's the driving force behind *Control*'s post-release plan, which already comprises two expansions and "some content in between the main game and the expansions," Puha says, although the studio isn't ready to reveal exactly what that will be. "But let's be real: *Control* is a relatively traditional singleplayer game. It does have a limited lifespan, in that sense. And nobody here is, like, overestimating what can we do post-launch to a singleplayer game. But the fiction of the game and the way the world is built is very suitable for us to add things to it. *Control* is a world that we do want to expand on, and of course you want to make sequels. And what we have wanted to do in the last couple of years, one of the reasons we signed with [publisher] 505 – well, they let us keep the IP, but we also have the freedom to experiment a little bit post-launch."

Control, then, is a game wholly emblematic of a studio transformed, a bridge between Remedy's past and its future. Its world has expanded in myriad senses: a single tie has been split into many different threads for the company, a veritable multiverse of possibility before it. And Remedy is now firmly in charge of pulling its own strings. ■

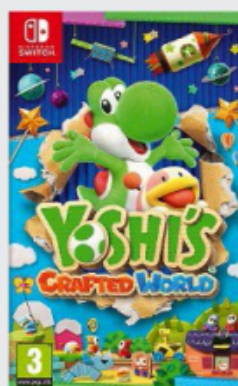
TIME-WARP

Control has been in development for three years: it's a relatively quick turnaround for Remedy. "When I joined, one of the first things I asked was, 'So, tell me why it took seven years to make *Alan Wake*,'" Puha says. "It was pretty simple: Remedy had quite a lot of money after having sold the *Max Payne* rights, and then you're dealing with the difficult second album syndrome – so there was a lot of experimenting, and suddenly three years have gone by. Everybody was like, 'Let's never do that again.'" A new platform and a growing company meant *Quantum Break*'s direction took a long time to figure out, too. But with ten million euros in the bank and a multi-project vision for the future, *Control* is the start of a much more efficient development process. "It's testament that we can do it. Making a great game doesn't need to take seven years."



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LAYSTATION





AN AUDIENCE WITH...

TIM SWEENEY

The head of Epic Games on how
to maintain the biggest game
and engine on the planet

BY JEN SIMPKINS





CV

Tim Sweeney grew up in Potomac, Maryland, and his future in technology seemed etched in stone when, at the age of five, he disassembled a lawnmower. Aged 11, he visited his brother's new company, and spent a week teaching himself BASIC on an IBM PC. He made his first game, *ZZT*, at evenings and weekends while studying mechanical engineering at university, releasing it as shareware under the label Potomac Computer Systems, a firm he'd founded from his parents' house that he would later rename Epic MegaGames. He never got his degree, but didn't need it: last year he entered the Bloomberg billionaires index, which tracks the planet's 500 richest people, with an estimated net worth of over \$7 billion. He's spent part of it buying land around North Carolina, and donating to conservation projects around the US.

The last few years have been transformative for Epic Games, even by its chameleonic standards. CEO and founder **Tim Sweeney** saw, in 2012, an industry on the precipice of change, and knew his company needed to change in kind. Fast forward to 2019 and Epic has created, in *Fortnite*, a true pop-culture phenomenon. Unreal Engine 4 has gone from strength to strength, its power improved off the back of *Fortnite*, its reach greatly expanded by it going free in 2016. Last year Sweeney and co launched the Epic Games Store, a PC game marketplace offering the most attractive revenue share in the industry; this year it was followed by Epic Games MegaGrants, a no-strings-attached \$100 million investment fund. Sweeney stands out not for his wealth and power, though he has plenty of both. Rather, it's his apparent intent to use those things to benefit the game industry as a whole, rather than simply his own pockets.

Obviously it's a different story today, but a few years ago Epic was in a tricky place. Cliff Bleszinski said that, shortly before he left, you told him where Epic was going, and asked him to make a choice: stay or go. What was your vision for the future of Epic then, and how close to it is the company that exists today?

Epic's gone through generations of strategy and platforms. And as you know, the game industry is a very tough place. Every few years, the platforms change, the business model changes, and companies either change along with it, or they disappear pretty quickly. Prior to all of this we spent seven years building the *Gears Of War* series in partnership with Microsoft. It was a singleplayer-focused game series for Xbox, which helped Epic hone our technical chops, honing up the Unreal Engine and leading-edge graphics features, building a game to a large scale. But we saw two things changing towards the end of that cycle. First of all, the budgets of games had gone up to an astronomical level: going into a huge singleplayer game, a lot of competitors had many hundreds of team members, sometimes 1,000. And only the economics of a publisher could make it possible to compete. And being an independent company getting just a royalty from a game, we thought we wouldn't be able to compete with the biggest-budget games.

The other thing we saw was the rise of online games, and games that a developer releases and then improves over the course of several years, just constantly growing and changing in response to fan feedback. That brought back memories of the old *Unreal Tournament* days. We released the game and then we spent the next year just constantly improving it. But the problem back then was we'd sold the game already, and we weren't making any more money from it. And so at some point, we had to

move on, you know? This was before free-to-play games, before item sales in games, and before anyone had really figured out a business model for it. So in 2012, we decided we needed to move away from building singleplayer, retail-focused games, and towards supporting online games. We needed to do it as our own developer and publisher, and take on all the responsibilities in the business ourselves. And we had to build a lot of new software and expertise to do that successfully.

We decided we needed help. We needed a really strong, knowledgeable partner to help us. In the prior generation we'd chosen Microsoft as our partner; that lasted through *Gears Of War*, and three generations of games. This time, however, we decided to work with Tencent, because we didn't want a publisher. We needed to operate our games ourselves, you know. And the interesting thing about partnering with Tencent was, yeah, they became an investor and our China publisher. But we have complete autonomy in our ability to do everything we need everywhere.

One of the first things that came to fruition was releasing Unreal Engine 4 for free: anybody could download it and build games without negotiating a business deal. Then we built several other games. We built a new *Unreal Tournament*. We built *Paragon*, a MOBA, and we struggled with it for two years. We finally built a game that a small audience of players really loved, but we could never ever grow it enough. We found that for every hundred players we brought in, after a few months, only three were remaining. That taught us a lot of really hard lessons about online-game development.

But those lessons really, really helped with the launch of *Fortnite*. It was in development in 2012, back when we made that decision. It was a *long* project. It'd gone through a lot of different transitions. We initially thought it'd be, like, a pretty simple Xbox Live Arcade type of game. And then over time it grew into a full PvE game, with a lot of almost MMO-like systems which launched as *Fortnite: Save The World* and achieved moderate success. We felt that it had done well, and put us in a good position. But a lot of the team had been playing *Arma* and *PUBG*, and were really excited about the battle royale genre. A small group decided Epic should make a battle royale.

So it was more the result of a creative impulse, rather than a business decision?

Yes, exactly. We thought it was a really interesting way to build a new game experience, and a lot of folks felt that the combination of *Fortnite*'s building mechanics and the battle-royale genre, 100 people together fighting in a large environment, would be a really unique combination.

"WE'VE ALWAYS BEEN AN INSANELY DYNAMIC AND AGILE COMPANY, AND THAT MEANS WE DO A LOT OF THINGS QUICKLY"

People who were playing these games played them very differently than they played other shooters. They came back. They constantly played, they constantly competed with friends. We decided we wanted to do it, but we didn't have anybody available. And so we went off and convinced the team who were building *Unreal Tournament* that they should spend a few months building this battle royale mode, just to see if it worked. Half of them were like, 'That's awesome, let's do it'. And the other half were like, 'What?'

What were your expectations? Did you think it was going to work out?

Well, there was a lot of enthusiasm on the team, the belief that 'battle royale plus building mechanics' would be really fun and interesting, and would lead to new gameplay situations. So we thought it was a worthwhile thing to do. You know, the *Fortnite: Save The World* launch had been moderately successful. And everybody realised that if we did this well, we'd hit that same magnitude of success or perhaps a bit more. So the team went off to build it and nobody had an appreciation of the magnitude of success it would achieve.

We launched the mode as part of the existing, paid *Fortnite* game. About a week later, we decided we should make it free. We were selling a few extra copies of *Fortnite* because of it, but it wasn't taking off like we expected. We decided to just let everyone play it, and see how much fun it was. Maybe it would take off, and we could figure out how to make money from it later.

Do it now and then work out the rest later on? Is that how you normally operate?

Well, yeah [laughs]. Because moving very quickly, and taking advantage of opportunities right when we see them, enables us to move a lot faster than our competitors. If we had to do a bunch of spreadsheets laying out expected profit for a thing before we actually did it, it would undermine the whole creative process. We've always been an insanely dynamic and agile



company, and that means we do a lot of things quickly. Some work, some don't, and the ones that work we double down on and the ones that don't, we figure something else out. That experimental attitude towards everything in our business has enabled Epic to accomplish so much.

Was there a specific point at which you realised you were onto something big?

After we released *Fortnite* for free the growth of it just became astronomical. Every week we'd see the playerbase double, and servers would break in some way. We were constantly fixing all the things that were going wrong as the game was expanding, and we were able to keep up. We never saw more than a few hours of downtime when something fell apart. But it was an incredible process to see the game expand that quickly. Once we realised that the game had become a phenomenon and people were playing it socially, we realised a lot of people were not able to play it just because they didn't have a high-end PC or console. We immediately began the effort to make it work on mobile devices.

I think that when we released *Fortnite* on iOS was when it really became a phenomenon. These games, they start out with a hardcore player base. These are mostly guys who play a lot of shooters, take them very seriously. But as soon as we started making the game work really well on laptop PCs and smartphones, suddenly co-workers were playing it, schoolkids were playing it, and people who were not regular gamers started playing it because their friends were playing it and it looked cool – it wasn't some grim military simulator. A lot of girls started playing, a lot of casual gamers, a lot of parents and kids playing the game together. It really took on a life of its own, becoming a mainstream phenomenon.

What was the atmosphere like around the studio as things were taking off?

It was really frenetic. Everybody was incredibly excited, but we were also working incredibly hard. A lot of the ►

Gears Of War was not only the standard bearer for Xbox 360, but also Unreal Engine – it was the game that showed off what Epic's tech was capable of



Sweeney's first game, *ZZT*, was released by Potomac Computer Systems, a consultancy business he set up at his parents' home



effort over the first year or so was on really expanding the game, bringing more people from all over Epic on to the project so that we could bring more relief to the core team and explore additional ways to improve the game. So there are hundreds of people right now on the development team but it's not one team; it's maybe a dozen different teams working on parts of it. And that works really well.

How else have you had to change the structure, and the day-to-day operation, of the studio to maintain such a different sort of game to what Epic had built previously?

The core principle in *Fortnite* is that we release new updates every week. So we're constantly making a really wide range of changes to it, and you have to be incredibly dynamic to do that. Back in the *Gears Of War* days, we had one team that grew from 60 to 100 people. There were always a lot of meetings to align everybody, to lay out what we were doing, then we'd build it in lockstep fashion. But with *Fortnite* we found that we had to decouple everything so that each little sub-team could make progress, and everything could ship as soon as it was ready. If one feature is delayed to the next release, the rest of the project ships. It's been critical to *Fortnite*'s rapid pace of development.

What has *Fortnite*'s success done for Unreal Engine?

Fortnite has pushed it to be optimised to an incredible extent on all platforms, because it's an incredibly demanding game. It's a huge open-world environment, with far more content than can fit in memory at once. It's a game with 100 players and multiplayer. It's taxing every component of whatever system you're running it on. And once we make the game run a little bit faster, we immediately push it further by adding new features. It's the same experience on every platform; taking a game that was built for PS4 and Xbox and making it run on the device in your pocket has been incredibly arduous, but we did it. We've managed to maintain the same game on seven platforms.

Engine optimisation has been a huge thing. Optimising *Fortnite* for iOS meant that partners were also able to take their console games and release them on PC or mobile. Every time we make the Unreal Engine better for *Fortnite*, it benefits all games that have high graphics requirements or high player counts. And there's a lot of feedback between these efforts. We made *Fortnite* run really well on iOS; it was a struggle, but we got it working. And we found that once we'd done that it was very easy to make the game run at 60fps on PlayStation and Xbox. The iOS optimisation effort improved the console experience.

"WE'RE CONSTANTLY MAKING CHANGES TO FORTNITE, AND YOU HAVE TO BE INCREDIBLY DYNAMIC TO DO THAT"

And in the process you're making life easier for games and developers which are, technically speaking, your competitors. Is it fair to say you don't really see things that way?

Games are a funny thing. If two great games come out, you'll probably play both of them. It's not like, say, iOS versus Android – you buy one and the other one loses out. Games are very complementary. Epic's been around for a very long time: we've gone through years where it was our engine business, and customers building up their games with our technology, that paid our bills. We've also gone through years where our games were a huge success, and made the company really profitable. Going back and forth between those periods makes us realise that we're highly dependent on the health of the overall game development community.

When SpatialOS and Unity fell out earlier this year you very quickly moved in to help affected developers move over to Unreal. You said that it showed how everyone's dependent on each other, even if they're competitors.

That's right. The interdependence, and independence, of all these different companies and components is critical. *Fortnite* is built with the Unreal Engine and uses Epic Online Services, but the servers are hosted on Amazon data centres. And we use dozens of thirdparty components building the game – some open source, some not. Everybody counts on these components all being able to work together. If one engine provider comes along and says, 'You cannot use our engine with these services, or this store,' we suddenly break a large swathe of the whole game industry.

We heard that when the SpatialOS flare-up happened, you were straight on the phone to its maker, Improbable, offering to help out.

Yeah, it spawned immediate conversations. I mean, everybody talks to everybody in the game industry, and we realised this was a first-class existential ►



Development of *Unreal Tournament* ceased late last year – little wonder given the success of *Fortnite* – though it's still playable online



The weekly updates, and the seasonal rhythm, keep *Fortnite* feeling fresh despite the fact that it still only has a single map

problem for everybody who makes game tools. We decided to partner together and help other developers get out of similar conundrums by offering funding. That was a very early launch of a part of the Epic Mega Grants programme, which is now much larger and much more wide-ranging.

How much of that programme is about good business, versus the realisation that the big players in the industry need to be better at looking out for other companies?

The really dirty part of the tech industry is the tendency of a company to launch a product with one set of terms that seems very friendly, build up a huge base of people who are dependent on it, and then change the terms far to the worse. Facebook became a huge social network, then convinced all these brands to come on board – Nike, General Motors, every one of the major companies in the world – in order to reach their customers.

And for a while, they were free to do that. Then at some point, Facebook flipped a switch and said, ‘Oh, if you want to push a message that your followers, who have chosen to follow you and read your posts, can actually see, you’re going to have to pay us a giant amount of money’. We’re very mindful of companies changing the rules. As we’ve gone through this process of launching Epic Online Services and the Epic Games Store, we’ve been very, very explicit in establishing our rules and the permanence of them, and giving partners complete assurance that they can count on us to provide them services in the way we promised.

What’s the answer to actually stopping companies from screwing people over? Is it just about setting the right example?

Partly. First, we need long-term binding contracts between companies and suppliers, where they say what the deal really, really, really is. When you’re building up a long-term dependency, you need absolute commitment. When somebody signs a licence deal with Unreal, it’s for the life of their product – we can’t change the terms. Another thing is that companies need to be much more willing to band together for their mutual defence against bad actors. I think there’s been way too much reluctance to do this. All developers are suffering under the very high store fees that exist on iOS, Google Play and Steam. And everybody’s afraid to talk about it. I’ve been speaking up about this issue for a long time, and I feel very lonely [laughs].

Why isn’t anyone talking about it?

I think it’s partly out of some belief that they ought to be nice partners, even when they’re not being treated fairly. And partly a fear of retaliation. But you know, if we don’t fight for what we believe in then we’re going to find ourselves in a worse world.

The Epic Games Store is part of your response to that. How is it performing so far?

We went in with very realistic expectations: we were starting from nothing and trying to compete with a juggernaut like Steam, which makes billions of dollars a year in revenue. We thought it would take many years to achieve a significant level of traction. We went out and developed partnerships and often we made guarantees of

revenue, so that we'd be taking the risk, rather than them. But for the major games we've launched, we've been far above our projections of success, and in a lot of cases, above the original estimates of Steam sales for the same games. *Metro Exodus* was completely eye-opening. They sold two-and-a-half times more units through the Epic Store than the previous game in the series. And they saw more growth on PC than on console. That was the first real hallmark of success. The other has been the release of free games, starting with *Subnautica*, which was downloaded four-and-a-half million times. We've had a number of games which brought in more than a million new gamers to the Epic Games Store, just to get the free game.

And that's been awesome. Usually to bring new customers into a service you've launched, you have to pay for advertising. You can run an ad on Google search or on Facebook, and the cost of bringing in one new user is, like, \$4, \$5 or \$6. But we've found we can bring in users for less cost than that by paying a developer for the right to release a free game. So new gamers are discovering developers they hadn't heard of before, and they're all potential buyers of sequels. All this positive economic activity is happening and it's costing us less than running ads, from which all the profit goes to these giant juggernauts. We feel very good about that.

Your strategy of buying up exclusives has been controversial. How do you reconcile that sort of protectionist strategy with your more altruistic endeavours? And is this just about the initial land-grab phase of the store, or is it something you intend to keep doing longer term?

Well, this being Epic, we never know what we're going to be doing in another few months [laughs]. But you know, this is an absolutely necessary step in gaining traction for a new store. Since Steam launched there have been many, many attempts to launch new independent storefronts. Not a single one has gained any significant market share compared to Steam, and I think you can directly attribute that to them not having a lineup containing a significant number of new, major exclusive titles. This is, we think, first of all reasonable because it's not like a platform exclusive where you have to buy one piece of hardware or another. You can install the Epic Games Store together with Steam, Origin and Battle.net. There are a bunch of stores, and they all work together.

The other thing is, this is an effort to bring in new users to the ecosystem. It's not an attempt to monopolise the sales of these games. We've started working with Humble Bundle; developers of exclusive games on the Epic Store are now able to also sell their games through the Humble Store, and we don't receive any of that

"FOR A TYPICAL GAME, THE STORE MAKES MORE PROFIT THAN THE DEVELOPERS THEMSELVES MAKE, AND THAT'S WRONG"

revenue. It's another way of building up the ecosystem. I'm quite convinced that if we didn't take these steps, we'd be the nice guys who fail, just like all the others. And the revenue share in the industry would remain 70/30, and the stores would continue to suck up an increasing fraction of the profits of the industry. You know what? Development is very competitive, their costs are going up. But the costs of operating a store are going down with the economies of scale. There's \$100 billion a year of revenue in these stores, and the cost of processing a transaction, providing bandwidth and customer support is maybe five to seven per cent. If we want to change the economics, we've got to do it with a coalition of developers who have all chosen to work together exclusively to bring people into a new ecosystem.

It's always annoying when you have to go to a new place to get a thing. I unsubscribed from Netflix twice when their selection changed unexpectedly. But, you know, at the heart of this are major economic forces. For a typical game, the store makes more profit than the developers themselves make, and that's wrong. It's got to change.

The industry has changed immeasurably since you and Cliff Bleszinski had that chat in 2012. What do you hope to see from the next seven or so years?

I hope all developers get a better deal. And once storefronts are no longer the centre of the industry, where they're just a service for customers and developers, I hope everybody will feel secure and confident enough to just link their stores together – so that even though you might buy games from a dozen different sources, they can all be updated together in a central place, and you don't have to deal with all the BS and overhead in the process. And you know, I hope the walls of these walled gardens come down and give every customer, and every developer, a fair and equal chance of success. That we will all come to play by a better defined and more constant set of rules than the ever-changing ones of the tech industry today. ■



Fortnite is monetised mostly through sales of cosmetics. It made a reported \$3 billion in profit last year – the same figure as Amazon





A N E W H O P E

How BioWare grabbed the biggest licence on the planet and etched its name in Star Wars history

By ALEX KANE

When LucasArts hired **Mike Gallo** in January of 1999, the Star Wars saga was on the verge of seismic change. The Phantom Menace, the first new Star Wars film since 1983's Return Of The Jedi, was months from release, bringing a whole galaxy of licensed merchandise – action figures, comics, Lego sets, Pez dispensers, videogames – right along with it. The movie, billed as Episode I of the Star Wars saga, would deal with the time period 32 years prior to George Lucas's original 1977 opus, showing the fabled Jedi Knights at the height of their influence. It promised audiences a nine-year-old hot-rod incarnation of Darth Vader, a fresh-faced Obi-Wan Kenobi and worlds both new and familiar.

Gallo's first role at LucasArts, the videogame studio Lucas had founded in 1982 as part of an agreement with Atari, involved finishing the game adaptation of The Phantom Menace. As its producer, Gallo guided a team of developers working on the PC version of the 3D action-adventure game and then later led an onsite team tasked with porting it to the Sony PlayStation. The Episode I game launched in North America on the same day as a second Phantom Menace tie-in, the fast-paced *Episode I: Racer*, ushering in an age of renewed interest in Star Wars gaming. Unfortunately, critics panned the Phantom Menace game.

Earlier efforts like *Shadows Of The Empire* and *Jedi Knight: Dark Forces II*, both developed in-house by LucasArts, had shown the enormous potential behind the licence. But for the next several years, Star Wars games tended to rely less on narrative and more on design gimmicks, with releases pegged to events such as The Phantom Menace. The reputation of Star Wars console titles, in particular, suffered accordingly. ►



This is an extract from *Star Wars: Knights Of The Old Republic*, published by Boss Fight Books. It's part of an ongoing series of criticism, investigation and reportage of classic videogames, including *Spelunky*, *Katamari Damacy* and *Metal Gear Solid*. For more, visit bossfightbooks.com.

"Everybody knew that Star Wars videogames should work," says Gallo of the industry's optimism for the franchise. But the sudden rise in demand for new Star Wars content had inspired LucasArts to ramp up its output dramatically, yielding mixed results.

As **Mary Bihl**, one-time vice president of global publishing at LucasArts, put it, "We went from a period of games that were very high-quality to a period where, I think, we lost some of the vision, and we were in sort of a survival mode." The company's solution was simple: refocus on quality. All they needed, then, was the right source of inspiration.

Many at LucasArts had an immense love for tabletop roleplaying. In 1987, a board game publisher called West End Games had released *Star Wars: The Roleplaying Game* — think *Dungeons & Dragons*, but with X-wings and lightsabers — and the game left a profound mark, not only on those who grew up playing it but also on *Star Wars* itself.

"A number of us internally had been discussing the potential of a big *Star Wars* [computer] RPG for some time," recalls **Haden Blackman**, another former LucasArts producer. "As you can imagine, many of us grew up playing pen-and-paper RPGs, including the West End Games *Star Wars*. And early in my career, a group of us at LucasArts were also obsessively playing *Baldur's Gate*, *Baldur's Gate II* and *Icwind Dale*. So the discussion around a *Star Wars* RPG was a recurring topic." **Simon Jeffery**, LucasArts's president at the time, began reaching out to thirdparty developers with histories of success. "It became clear," Blackman says, "that all of them rightfully wanted the freedom to tell a big, sweeping story."

Baldur's Gate, a fantasy roleplaying game for the PC, had been developed in the late '90s by a Canadian company called BioWare. Founded by a trio of practicing physicians — doctors Ray Muzyka, Augustine Yip and Greg Zeschuk — the Edmonton, Alberta studio was born out of a mutual passion for comics, computer games and tabletop RPGs such as *Dungeons & Dragons*. *Baldur's Gate*, BioWare's second game, earned widespread critical acclaim and became the second-highest-grossing PC title of 1998.

"It was a long time ago — if not exactly far, far away — so some of my memory's hazy," says Jeffery, who started working at LucasArts the same year *Baldur's Gate* was released. "But I was into *Baldur's Gate*, and was so impressed by what it had done in the RPG market, how it looked and felt. So I really wanted to approach BioWare about a possible collaboration, and Haden [Blackman] and I talked it through with a few others. I didn't know Ray [Muzyka] and Greg [Zeschuk], but I figured out how to get ahold of them,

posed the idea, and they asked me to come visit them in Edmonton to chat it through."

Jeffery got on a plane bound for the Great White North and arrived to discover that although he wasn't fond of the cold weather, the team at BioWare seemed like the perfect partner for a large-scale *Star Wars* RPG. "It was an insanely invigorating day," he says, "and I knew there could be something pretty special about to happen. So the team put some thoughts together, I pitched it to Lucasfilm and Lucas Licensing, then to George [Lucas] and the board, and we eventually got a green light to get it going." These discussions took place in late '99 and early 2000, while pre-production on *Attack Of The Clones* — Lucas's sequel to *The Phantom Menace* — was already well under way.

"The genesis of the idea was from Simon [Jeffery], Ray [Muzyka], and Greg [Zeschuk]," Gallo says. "They hashed out some stuff and made a deal, and the goal of everyone — which was supported on the LucasArts side by Simon — was to make the best game they could. And that didn't happen that much back then. I'm sure there's plenty of places where that doesn't happen now. There's definitely developers and studios out there that aren't gonna ship a game before it's done, but LucasArts, at the time, really didn't have that luxury. This was a big deal to say, 'Look, this game is gonna be made great, or it's not gonna get made.'"

BioWare had the trust of LucasArts, freedom from the baggage of a movie release, and a shared desire to honour the films and tabletop games the devs had loved in their youth. The team was in the right place at the right time, dead set on making something great.

"Back then, we were a much smaller company," says **James Ohlen**, who served as the project's lead designer at BioWare. "You know how they say that companies change when they reach 50 [employees], and then they change again when they reach 150? I think we were between 50 and 150, so everybody knew everybody." This was not the BioWare of the mid-2010s, with its half-dozen subsidiaries scattered across North America. There was a strong sense of camaraderie at the studio. Everyone who worked there loved games, and they'd spend their downtime playing and discussing their favourites. Blizzard's early hits — especially *StarCraft*, *Warcraft II* and *Warcraft III* — were a frequent topic of conversation.

When time came to start work on *Knights Of The Old Republic* for LucasArts, the Canadian developer found itself managing a crisis. The studio's longtime publisher, Interplay, had been in dire financial straits for years, and in September 2001 BioWare filed a lawsuit against the publisher and its parent company for unpaid royalties. Two months later, BioWare — in the midst of development on its licensed ►

“BIOWARE HAD THE TRUST OF LUCASARTS AND FREEDOM FROM THE BAGGAGE OF A MOVIE RELEASE”





Dungeons & Dragons RPG *Neverwinter Nights* — terminated its contract with Interplay. “And Ray [Muzyka] and Greg [Zeschuk], our founders, had to negotiate, essentially, an on-the-fly deal with a new publisher, which was Atari, in order for us to continue to be paid and be able to finish that game and launch it,” Ohlen says. Many who’d been working on *KOTOR* for the past year had to suddenly shift gears and help *Neverwinter Nights* get finished. A five-year project with a team of more than 75 developers, *Neverwinter* had been an enormous undertaking. BioWare was eager to move on to something new.

“I remember we were trying to figure out what our next big game was going to be when we were starting up *Neverwinter Nights* and finishing off *Baldur’s Gate II*. And Ray would come in, and sometimes he’d throw some books on my desk and say, ‘Hey, you should read these. This is something we should look at,’” Ohlen says. “Funnily enough, one time — the reason I got into George R R Martin’s *Game Of Thrones* was because Ray had thrown it down on my desk and said, ‘Hey, we’re negotiating with this guy to potentially make a game.’” Videogame history is riddled with what-ifs, however, and no such deal was ever struck. Besides, LucasArts had an even better idea.

“Ray and Greg took us all — the core team — into the boardroom,” says **John Gallagher**, concept-art director on *KOTOR*. “There were about 30 of us in the room. And they said, ‘Okay, guys. We have two offers on the table, and here they are.’ They said, ‘One’s from Sony,’ without really giving any details. Just: ‘It’s from Sony, and it’s an RPG.’ It was vague. Then, ‘And the other one’s Star Wars.’ And all the air left the room. We’re just like, ‘Are you fucking kidding? Fucking Star Wars? Are you serious right now?’ So of course the energy in the room starts to crackle and hum.

“Based on some preliminary discussions, LucasArts had identified category leaders in various videogame genres. And they said, ‘Well, BioWare’s — on the basis of what we’ve seen and what we’ve played — doing the best RPGs in the game.’ So we all got super-excited, and then they said, ‘Well, you can’t tell anybody. At all. Anyone. Ideally, please don’t tell spouses.’” Gallagher drove home that night and told his wife the news right away.

Everyone at the studio spent several days in ecstatic disbelief. This was their chance to give something back to the movie franchise that meant the most in the world to them. “And I realise, of course, it’s an enterprise — it’s an intellectual property created almost entirely, explicitly, to make money. We know this,” Gallagher says. “But that doesn’t diminish the impact that it originally had on quite a number of us. For a good majority of us in the room, Star Wars was the golden goose.”

Despite all the excitement, Ohlen was apprehensive about the project. He’d been the lead designer on *Baldur’s Gate* and *Baldur’s Gate II*, as well as the yet-unfinished *Neverwinter Nights*, but making a Star Wars RPG presented its own problems: what types of tabletop game mechanics could be adapted to fit the source material? How would a mix of blaster fire, high-tech gadgetry and lightsaber combat work in a dice-based game system? What kind of production values would it take to achieve something that felt truly authentic to the Star Wars universe? “And we had a pretty short timeline,” he says. “So, while I was a huge fan of Star Wars, it was also a little bit daunting. It wasn’t as easy as, you know, making another fantasy game.”

In Dungeons & Dragons and similar tabletop games, players roll physical dice to determine whether or not their actions will be successful — a melee attack, a magical defence spell, a treacherous climb. For the *Baldur’s Gate* series, BioWare had implemented a combat system using virtual dice, which simulated the turn-based flow of D&D skirmishes. As luck would have it, a new tabletop Star Wars RPG was also in development during the conceptual stages of *KOTOR*.

“I might have been the first to suggest using the Wizards Of The Coast D20 ruleset as the underlying system,” says Haden Blackman, “partly because I liked that the other BioWare games were based on the D&D core rules and partly because I was constantly pushing for more collaboration between LucasArts and other Star Wars creators.” A lot of Star Wars material crossed his desk early in development during his tenure at LucasArts, so Blackman knew Wizards Of The Coast had a new pen-and-paper RPG in the works. He felt the Star Wars Roleplaying Game (2000), built on the same trademarked D20 System that Wizards used for its Dungeons & Dragons products, would be a natural fit for BioWare’s Star Wars game.

“**We wanted to** capture the idea of playing an RPG with your friends—you know, playing an old-school tabletop, D&D-style RPG,” says *KOTOR* senior writer **Drew Karpysyn**. “The big appeal of that is, you’re with your friends, there’s a lot of interaction. Things you do affect what they do. Things they do affect what you do.” Except in this case, you’d be interacting with non-player characters. In most BioWare RPGs, two or three AI characters typically follow you wherever you go, fighting alongside you in battle and striking up the occasional conversation.

“Those companion characters, your squadmates, and the way they interact with you really makes you feel like there are other people with you on this journey,” Karpysyn says. “And that’s something you can leverage in games in a way ►

“WE WANTED TO CAPTURE THE IDEA
OF PLAYING AN RPG WITH FRIENDS —
AN OLD-SCHOOL D&D-STYLE RPG”

you can't in something like a novel. In a novel, you don't get that interaction — you don't get the back-and-forth — whereas in a game you can be more responsive to the player and the audience, so it's really a unique situation."

"The thing that I remember pretty vividly about the beginning of this project was the initial pitch doc that we got from BioWare," says producer Mike Gallo. "Once the discussions were happening, they put together a story pitch and a gameplay pitch, and the very first thing that we talked about doing was a *Baldur's Gate*-style Star Wars game — action-oriented, with RPG elements, and that kind of three-quarter isometric view. And that's what the initial thinking was. It was gonna be PlayStation and Xbox; it wasn't gonna be just an Xbox and PC game. Pretty quickly, it became apparent that that wasn't gonna be the right way to go."

Meanwhile, *Neverwinter Nights* aimed to raise the bar with its full-3D graphics and technical complexity. Because the timelines for *Neverwinter Nights* and *Knights Of The Old Republic* overlapped, BioWare knew it'd need to rely on tech like the AI and character-generation tools it had already built for *Neverwinter* when it got around to making *Knights Of The Old Republic*. But *Neverwinter*'s Aurora Engine would also have to evolve in order to support the development of both Xbox and PC versions of the Star Wars game.

In a 2002 interview with GameSpot, Gallo explained that "the engine itself is based on *Neverwinter Nights*'s engine, but it's actually been almost completely rewritten for *Star Wars*." Speaking to him again on the phone in September of 2017, he took the opportunity to further clarify: "With these types of technology — it's very difficult to call something an 'engine' or a 'tool.' Or whatever it is. It is far more complex than that. And technically a lot of this stuff is iterative, but they're basically tearing those things down and rebuilding them every time. Making them more efficient, making them perform better, doing whatever they need to do to take advantage of the hardware. So, yes, it was a new engine built on their knowledge and their tech that they had built up with their previous games." The Odyssey Engine, as it became known, would later be used for BioWare's original RPG *Jade Empire* (2005) as well as Obsidian Entertainment's *Knights Of The Old Republic II: The Sith Lords* (2004).

"During *Knights Of The Old Republic*, that wasn't the only project I was working on," Gallo says. "Because they were external projects [involving collaborations with other firms], typically people who were on the production team would have two or three or more projects they were managing. That year was pretty rough because they had asked me to manage the team that was doing *Star Wars: Obi-Wan* when we made the decision to move it from PC to

Xbox. And so I was working with a group on the internal team for that, and then also occasionally going up to Edmonton and working with a group from BioWare. A lot of time with the BioWare guys was spent in prototype and design and concept, so a lot of [my] involvement was making sure that approvals were happening."

And the approvals process at LucasArts was extensive. "We were working with the marketing team and licensing department at Lucasfilm and making sure that everything was getting approved through them. At that time, George Lucas was pretty involved in approving that stuff, so we would get notes back from him that we would have to address. We never got to meet with him during that time, but we were still getting notes from him."

It was an incredibly busy time for LucasArts. In addition to *Knights Of The Old Republic* and *Obi-Wan*, the publisher released 12 other Star Wars games in the three-year period from 2001 to 2003: *Star Wars: Starfighter* (Feb 2001); *Star Wars: Super Bombad Racing* (Apr 2001); *Star Wars: Galactic Battlegrounds* (Nov 2001); *Rogue Squadron II: Rogue Leader* (Nov 2001); *Star Wars: Racer Revenge* (Feb 2002); *Star Wars: Jedi Starfighter* (Mar 2002); *Jedi Knight II: Jedi Outcast* (Mar 2002); *Star Wars: The Clone Wars* (Oct 2002); *Star Wars: Bounty Hunter* (Nov 2002); *Jedi Knight: Jedi Academy* (Sep 2003); *Rogue Squadron III: Rebel Strike* (Oct 2003); and the massively multiplayer (and massively ambitious) online game *Star Wars Galaxies* (Jun 2003).

"God bless the guys at BioWare, and Simon Jeffery, and Haden [Blackman]'s contributions," Gallo says. "Haden and I shared an office for the whole time that *Knights* was in production while he was working on *Star Wars Galaxies*. So there were times where that was the tensest office in the entire building because of what was riding on those two games. And I felt Haden had a much more difficult problem than I did." After all, *Galaxies* was to be the first-ever Star Wars MMO, a shared online sandbox that would require support over the span of nearly a decade.

Knights Of The Old Republic, as the first Star Wars role-playing videogame, was also a massive gamble. As a console RPG for the Xbox, it had to follow Bethesda's 2002 masterpiece, *The Elder Scrolls III: Morrowind*. It also had to tell an all-new, original story in the Star Wars universe — which would revolve around the player's experiences — yet stay true to the spirit of the source material. Former LucasArts VP Mary Bihr was especially worried about the untested waters of the Old Republic setting. "Maybe archetypes weren't enough," she wondered. "Maybe people wanted to play [as] Han Solo. Maybe they wanted *Darth Vader* in the game." ■

“THE FIRST THING THAT WE TALKED ABOUT WAS DOING A BALDUR'S GATE-STYLE STAR WARS GAME”



T H E M A K I N G O F . . .



S T E A M W O R L D H E I S T

It was supposed to be a simple job – but
game development rarely is

By CHRIS SCHILLING

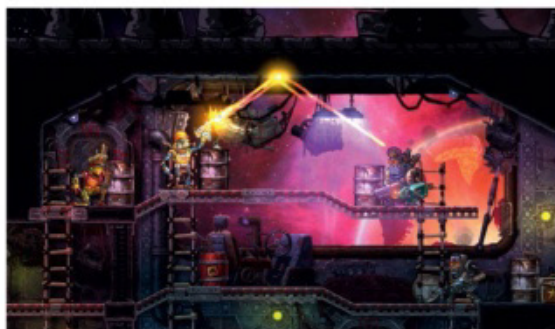
Format 3DS, iOS, PC, PS4, Switch, Vita, Wii U
Developer Image & Form
Publisher Image & Form, Nintendo
Origin Sweden
Release 2015

This is so long ago that only really old people can remember," laughs Image & Form's founder and CEO **Briann Sigurgeirsson**. Well, we suppose six years, give or take, is a long time in game development. It was August 2013, and his studio had just finished its third commercial release and breakout hit, *SteamWorld Dig*. Already the game was a critical success, but it was too early to reap the commercial rewards. During an internal post-mortem, Sigurgeirsson insisted that the nine-month development time had been "way too risky" for a studio of that size. Its next game would take more than two years to complete.

Needless to say, that wasn't part of the plan. But he admits that after considering two smaller games ("One was distinctly iOS, and one... hmm, we were thinking 3DS," he says) and spending two or three months on both, "neither was really working out". Having set the scene, Sigurgeirsson whisks himself away; he's busy preparing for the release of the next game in the SteamWorld universe, *SteamWorld Quest*, and leaves us in the capable hands of creative lead **Olle Håkansson**, who picks up the story from the autumn of the same year. "I think we were all sitting down at the lunch table, and we had just played the expansion to *XCOM*, *Enemy Within*," he continues. "Basically, we loved that game. And we were just playing around with this idea – if we made a game like that, an *XCOM*-ish kind of game, how would it look?"

It had to be 2D, of course. "That's all we knew, back then," Håkansson laughs. And then someone on the team came up with the notion of free aiming as a core mechanic. Suddenly, the new game had its hook. He sat down and wrote out a pitch for a sci-fi game set in space, before bringing it to Sigurgeirsson. The boss, as Håkansson calls him, gave the idea the green light before a line of code had been written. He had but one stipulation: it had to be set in the SteamWorld universe. After a few adjustments, the revised pitch formed the basis for what would eventually become *SteamWorld Heist*.

Most of the core systems were there from the very beginning. A major concern was cutting out some of the randomness of *XCOM*; anyone familiar with the series will know how it feels when a crucial shot inexplicably misses its target. "Where it's like a 98 per cent chance of



If you shoot the hat off an opponent, you need to retrieve it – and then survive the stage – to add it to your collection

success, and your shotgun is basically penetrating the model of the enemy?" Håkansson chuckles. "That was very much one of the core issues we wanted to solve – or, rather, improve upon." Though keen to avoid frustrating players by making it feel like it was their own fault if they missed the shot, Håkansson still wanted to retain an element of chance –

"THERE IS SOME RANDOM VARIATION IN THE DAMAGE YOU DEAL... WE WANTED [CHANCE] TO BE LIKE A LITTLE SPICE"

understanding that *Heist* still needed an element of uncertainty to add tension. "There is some random variation in the damage you deal, for the same reasons [as *XCOM*]," he tells us. "But the amount of chance – we wanted it to be like a little spice that you put on top of the game, rather than having it as the main course. That's basically how we saw it."

Still, the aiming system was lacking something. Here was a skill-based mechanic that didn't require quite enough skill, with little-to-no risk involved. And so a decision was made that the robots would 'breathe', in a similar manner to many other videogame snipers, while they were lining up a shot. The steam rattling around their joints would cause their aim to naturally waver, with players having to factor the gentle bob and sway into the timing of their shots. "That little bit of realtime variation just made it more exciting," Håkansson explains.

To further complicate the aiming, there's plenty of cover in the ships you raid in *SteamWorld Heist*, and your opponents have a tendency to hunker down behind it, forcing you to pull off billiard-like trick shots, bouncing bullets off walls and ceilings to hit them. That, too, was in place "pretty much from day one," Håkansson says. In fact, it was first tested as part of a prototype programmed within the world of *SteamWorld Dig*. "We made a little branch of that and implemented the core turn-based movement and aiming, but using the [existing] graphics and style," he says. The experiment helped convince Håkansson and the rest of the team that this particular mechanic could make combat more exciting; until then, no one was entirely convinced it would work. "Sometimes you have something that sounds very fun. And it's really not when you actually implement it all the way. But this was."

One of the game's more playful touches comes in the form of equippable hats which can be shot off, like a scene from a classic Western shootout: yet another idea that was introduced during the very early stages of development. "It fit so well," Håkansson says. "Barely missing an enemy's head but shooting off their hat was just such a fun concept to us." The same goes for the occasional lucky ricochet. "Those shots that hit the enemy on the other side of the room that you didn't intend – that adds a lot to the whole experience as well, just having that element of randomness." Again, it's like *XCOM*, but it feels a little fairer – even when you're on the receiving end of an unfortunate rebound.

That sense of fairness was important to a studio that prides itself on making its games accessible to a broad audience: a corollary of the staff's tastes in general, Håkansson says. "We probably tend towards games that are not quite so hardcore-oriented, and easier to get into. While still being deep and interesting experiences, of course." That meant spending some time adjusting the user interface (the finished game's wonderfully intuitive UI uses a colour-coded system for movement and firing) while considering how to make a "relatively minimalist" turn-based strategy. The team settled on allowing each character to take two actions per turn, after a fortnight's worth of prototyping different ideas. "We tried five different systems – like having a pool of action points, for example, that you could use for

movement and/or shooting several times. But this just felt much better and quicker."

The pieces were falling into place remarkably quickly. Now, Håkansson was keen to emphasise the importance of unit positioning: placing a unit next to Steambots leader, Piper, for example, gives them a damage bonus. "That was also relatively early!" he laughs. "As soon we got the basic movement and aiming in place, we wanted to include these abilities. Because that's how you start getting the more strategic setups that we wanted – this risk-versus-reward thing where you stand out of cover or bunch together, which might be dangerous if there are explosives nearby."

Everything, it seemed, was going according to plan. So what in the (Steam)world took so long? With all the central mechanics in good shape, it must surely have been the overarching structure that caused the biggest problems? "We did have quite a lot of trouble in the beginning," Håkansson sighs. The original plan, he says, was much more ambitious: he'd conceived an expansive space map around which you'd guide your ship, with more simulation-like elements besides. Håkansson reckons the team spent "probably about a year" on the idea before completely scrapping it in favour of the comparatively simple map of the finished game – which still gives you some freedom to choose where you go next.

All of this was up and running, Håkansson says – so why was it nixed? Given *Heist* was developed primarily for 3DS – the studio's strong relationship with Nintendo meant it was a timed exclusive – we ask if technical limitations played a part. "It was more a design issue, actually," Håkansson says. "It was just too complex." There was, he admits, a surfeit of systems to explain to the player. Indeed, at one point, the studio wanted to make fuel conservation a more pressing concern: if you ran out, and were unable to buy more from a space trader, you'd lose the game. "We actually had like a Roguelike setup for a while, where you'd restart the game from the beginning," Håkansson tells us. "But none of that worked very well."

In the end, he says, the whole thing had to go. "It's interesting, I read something about *Into The Breach* – they didn't go into the details, but their process seemed very familiar." They, too, he says, had developed a number of systems that were ultimately discarded, with only the strongest core elements retained. Few would argue that

Q&A

Olle Håkansson
Creative lead,
SteamWorld Heist



The strategy genre is traditionally complex, but *SteamWorld Heist* makes it surprisingly straightforward for beginners. Was that ease of access something you spent a lot of time getting right?

Definitely. From the shape of the UI to how we do the tutorial, we spend tons of time on that. We really want to make games that are accessible. That comes with a lot of testing – we have tons of testers of different skill levels that we take in. We always have a problem with finding fresh testers – people who haven't played the game already. Because if they have played it before, you can't really gauge their initial reaction. So it's about scraping our entire network of connections dry, basically [laughs].

Given the amount of time it took to develop and, by extension, how important it had become to the studio, were you particularly anxious about the reception?

I haven't released a single game where I wasn't anxious about the reaction [laughs]! Even quite a few games in. It's always scary.

***Heist* wasn't as immediately successful as you'd anticipated, but you must be pleased with the way its reputation and commercial success have grown over the years?**

Of course, it's nice to hear people like the work. *Heist* is a tricky one. Given how it cost much more than we expected and kind of undersold in the beginning... it's very tricky to make the decision to bring something like that [to other consoles]. But seeing positive reactions on the Internet, people liking the game – of course that makes a difference.

Subset Games' exceptional strategy title didn't benefit from such judicious pruning, and a similar approach ultimately worked for *Heist*. "Unfortunately, it took a ton of time. But I think the result was better for it."

Painful though it may have been to lose one of his bolder ideas, Håkansson suggests it's par for the course at a studio that likes its games to feel refined. That, he says, is all down to the personal tastes of its staff. "We just like those polished experiences more than the diamond-in-the-rough kind of games." Even as Image & Form struggled with *Heist*'s structure, the development team was constantly rebalancing the tactical systems at its heart: a time-consuming process, but not all that

complex, Håkansson says. "We don't exactly have, like, a time budget for balancing, it's more knowing we have to be done with the game in this many months. The process is basically me and other people who work within the design team just playing the game over and over. You get a feel for it, tweak the numbers, repeat."

Despite the fine-tuning, there's one thing Håkansson believes *Heist* didn't get quite right: the inventory system. With limited storage slots, players are forced to make difficult choices about which loot to take with them. "In general, I think it's good design practice to have limitations that force the player to make interesting decisions," he says. "Like, should I keep this thing or this thing? The problem is I think we were a bit too harsh, because that was one of the biggest complaints we got from customers. When I playtested it, I usually collected pretty much all the upgrades to inventory size, because it's useful to have, while players probably didn't feel that they needed to get it and so their experience was skewed from what we expected."

That aside, Image & Form was happy with *Heist*, if not with the time it had taken to complete. "It was insane for us," Håkansson admits. "I'm still not really sure how we survived for that long." He holds his hands up to "overscoping it" with the game structure, but says issues on the production side were equally to blame. Quite simply, there were not enough programmers – and *Heist* was, Håkansson says, a code-heavy game. "We basically had artists sitting there rolling their thumbs, while coders were working overtime and still not getting all of it done."

It was a difficult time, then, but one that ultimately benefited the studio. The secret to succeeding in *Heist*, it turns out, is rather similar to getting a company running like clockwork – make sure you recruit well, and you'll end up with a balanced team. Though *Heist*'s release was tinged with disappointment – Håkansson says the critical response was not quite as glowing as he'd hoped given the time and effort invested – over time it has attracted a number of vocal advocates. Indeed, its reputation has grown, such that many now consider it the studio's finest game. That it's been ported to another six formats, including Switch and iOS, is another vindication of the time it took to get right. For once, Sigurgeirsson may have it wrong: six years may be a long time, but *Heist*'s players clearly remember it well. ■



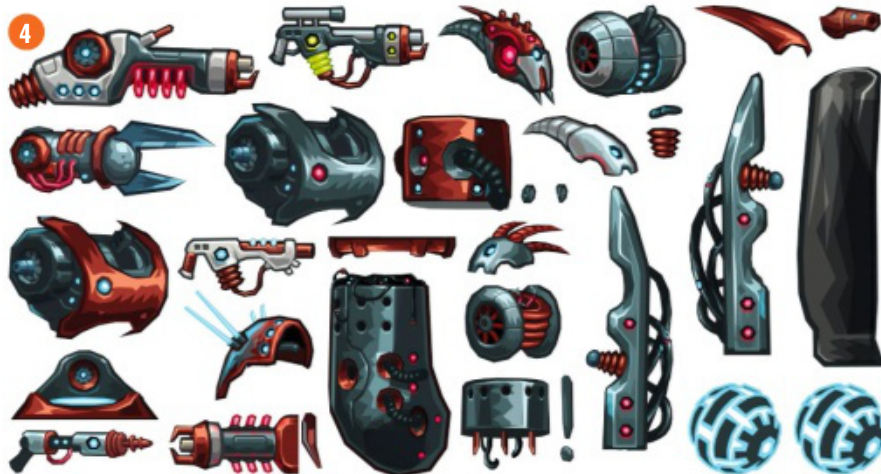
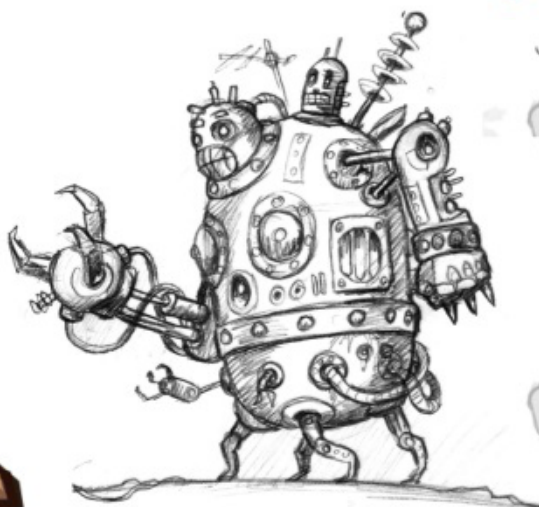
1 Håkansson likens the genre-shifting flexibility of *SteamWorld* to the *Pixeljunk* games. "We want to make different types of game but still have people recognise it as part of the series. And that's worked brilliantly for us."

2 The diesel-powered Royalists are just one of the robot races you fight against.

3 Key art of the Steambot heroes, forced into space after Earth exploded.

4 Vectron weapons. Håkansson: "We don't want to go too high-tech when it comes to the Steambots. We want this lo-fi, mechanical feel to everything. That's why we introduced the Vectron. Because they're electrical, they're magical, they can do things that Steambots can't – like teleport."

5 Some character sketches, including an early version of Steambots leader Piper (second from left)





STUDIO PROFILE

STAINLESS GAMES

The Isle Of Wight's finest on
25 years of cars, cards
and controversy

By CHRIS SCHILLING



Founded 1994

Employees 35

Key staff Patrick Buckland (CEO, co-founder, owner), Neil Barnden (co-founder, game director) Matt Edmunds (COO, director)

URL www.stainlessgames.com

Selected softography *Carmageddon*, *Atari Classics Evolved*, *Magic: The Gathering – Duels Of The Planeswalkers*, *Carmageddon: Max Damage*

Current projects *ShockRods*

You need a certain steel to last a quarter of a century in the game industry. Since 1997's *Carmageddon* instantly put it on the map, Stainless Games has survived a number of cancelled projects, effortlessly moved from car combat to card combat and back again – with an interlude remaking classic arcade games – and now has four projects on the go, having bought back and subsequently resold the rights to its biggest hit in the meantime. The secret of its longevity? "Do a good job," CEO and co-founder **Patrick Buckland** tells us. "That's how you survive."

Buckland had been freelancing in the game industry since 1982, working on the Apple II and then Macintosh for a variety of companies in the early '90s when he began to feel rudderless, and decided to set up his own company. In late 1993, he teamed up with **Neil Barnden** and founded Stainless Games without a particular idea in mind, but a hunger to build for the future. "Which obviously worked, because 25 years later we're still here," he says.

The studio's first game might still be its most famous – or infamous. *Carmageddon* began life as a playable demo called *3D Destruction Derby*, which Stainless touted around while doing some other contract work. Publisher SCi eventually snapped it up. By this time it was 1995; the game was now *Mad Max*, but SCi couldn't get the licence. Then it was set to be a Death Race tie-in for a cinematic reboot that was later canned. "SCi said, 'Sod it, let's just do it anyway, we'll create a new brand.'"

The title came from Barnden. "I got shit for that!" he laughs, responding to Buckland's praise for the name, which the CEO concedes he hated at the time: "I remember when we first got it, I was like, 'What the fuck? Carma-what?' But yeah, it was definitely a good name." After a playable demo in late 1996, the full game launched in '97, by which time it had become a headline magnet, with a hysterical mainstream press outraged by its cartoonishly gory action. "All the controversy, court cases, having it banned in various countries and stuff – that was all great publicity," Buckland laughs.

It was, he notes, less amusing for SCi. The publisher's founder, Jane Cavanagh, was threatened with arrest, and its offices were raided. After a lengthy court battle, SCi finally won, and the BBFC certified the game. But by then, most players had seen the original version (with red rather than green blood) because a



Stainless Games has a remarkably loyal workforce. Is it passion making perfect? Or perhaps the island location?

legal loophole meant that a patch was already available on floppy disk, which was placed at point of sale in stores. Meanwhile, in Brazil it was banned with a fortnight's notice – the announcement resulted in sales going through the roof. "I think they were also made to produce a road safety CD as punishment," says COO **Matt Edmunds**. "Yeah," laughs Buckland. "Ironically, for a while we were probably responsible for better road safety in Brazil."

Stainless immediately set to work on a sequel which launched the following year. But by the

And things have now come full circle for one of the men who signed up *Carmageddon*: SCi alumnus Fergus McNeill will, by the time you read this, be a full-time Stainless employee.

Having been taken off the series with which it had made its name, Stainless began to work on several projects, but the studio's luck wasn't about to improve. Between 1999 and 2004, it experienced a run of cancelled projects – three in a row didn't see the light of day. For two years it became part of a larger company for the sake of stability. At the time it was working on a large project with EA Sports: a rally game. But during development, Codemasters' *Colin McRae*

"COURT CASES, HAVING [CARMAGEDDON] BANNED IN VARIOUS COUNTRIES AND STUFF – THAT WAS ALL GREAT PUBLICITY"

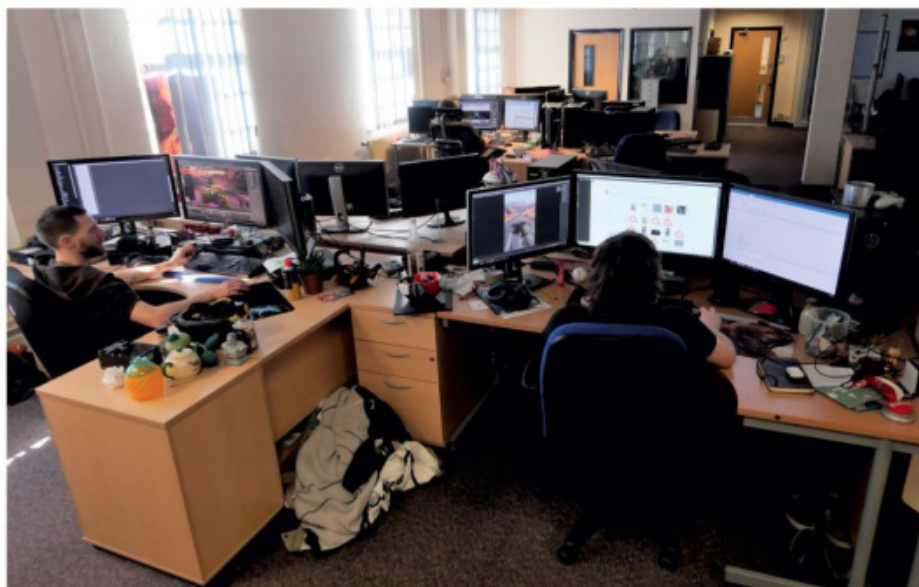
end of development, having worked "past dawn" seven days a week during the summer of '98, the studio needed a break – if only to work on something else for a while. It was here that the relationship with SCi soured; the publisher took the studio's request as a refusal to work on a third *Carmageddon* game, and passed on development duties to Torus Games in Australia. The studio didn't find out until staff picked up a copy of CGW magazine and saw *Carmageddon TDR 2000*. "Also, SCi never paid us any proper royalties," Buckland says. "I'll gladly put that on record these days because they've all gone. So we haven't actually made any money from *Carma*, really. Even though it was number one around the world."

It's all water under the bridge now, he says. "To be fair, SCi took a chance on us when no one else was willing to. We were a startup, and even though I had history, it was more in America – the Apple brand just didn't exist in Britain at the time, so I had no track record as far as most British publishers were concerned."

Rally had gone supernova. And with Sony's *WRC: World Rally Championship* also on the market, the publisher didn't want to be late to the party. "Even though we'd basically finished the game, as far as EA was concerned that was only a small part of the budget," Buckland recalls. "They always put more money into marketing than the game so I understand why it was cancelled. Good game, though." By 2001, Stainless had become independent once more, and began working on a new project with Midway. That, too, was canned.

The studio's next big step forward was rooted in its owner's past. When Xbox Live Arcade began to take off, Buckland saw an opportunity for the developer to focus on smaller projects. One of its first was a familiar name: *Crystal Quest*, a remake of an action game he'd developed for the Macintosh back in 1987. Then he pitched to work with Atari, which was looking to revive a number of its dormant properties for XBLA: "We met Atari at Game Connection, and they gave it to someone else. ►

STUDIO PROFILE



The studio's current big project is car-based 6v6 shooter *ShockRods*, though several others are under way, including an unannounced CCG. Given Stainless' excellent track record with *Magic: The Gathering*, we're expecting that game to be a strong one

Then at the next Game Connection, Atari was there again. The developer they'd chosen had cocked it up completely. They grabbed us and said, 'Hey, are you still interested in doing this?' Updated versions of *Centipede*, *Missile Command*, *Asteroids*, *Tempest* and *Battlezone* followed, with Stainless then bringing nine of those games – alongside new versions of *Pong* and *Lunar Lander*, and 50 unlockable Atari 2600 games – to PSP with *Atari Classics Evolved*.

By then, its prolific efforts – Buckland notes at one time the studio had more games on XBLA than any other – had attracted the attention of more publishers, leading to another passion project, and one of the company's most successful partnerships. Wizards Of The Coast had been planning on bringing *Magic: The Gathering* to consoles, and asked Microsoft for developer recommendations. Stainless was one of three or four options. "They said, 'These guys are a safe pair of hands' – and I was an obsessive *Magic* player at the time. So was Matt, actually – we used to play in the car waiting for the ferry and balance the cards on the handbrake and stuff. I had 30,000 *Magic* cards, I was very serious about the game. We were going to get that project. I was *determined* to get that project."

Get it Buckland did, and the relationship with Wizards Of The Coast was a fruitful one, beginning with 2009's *Magic: The Gathering – Duels Of The Planeswalkers* through four annual sequels between 2011 and 2014, and onto 2015's *Magic Duels*. In the meantime, Stainless had begun to look into reacquiring the rights to *Carmageddon*, which was now owned by Square Enix. Whispers suggested that the publisher might be open to selling. "Square aren't the sort of company that would rather sit on a brand so that nobody else can use it, but

they were quite happy to sell it. It was basically a back channel hint: 'You know what? They might sell it if you talk to them'. So we did, and they did," he laughs.

Fittingly, it would be called *Reincarnation*. "We set up a little skunkworks-type backroom group, just developing the ideas of what we wanted to do next with it," Barnden says. Ultimately, the team decided on a reboot of the original. With plenty of characters and assets Stainless could potentially reuse, that made the most sense: "We were keen to see them back and we were sure the fans would be keen to see them back." It was 2012, with Kickstarter just

far as it could, and sold it on to THQ Nordic with absolutely no regrets. "We rebuilt the brand and rejuvenated the userbase," Edmunds says. "And in terms of player ratings, it was a high four out of five."

Stainless has since reluctantly abandoned its own engine in favour of Unreal Engine 4 for its latest game. *ShockRods* is very much in the developer's wheelhouse, albeit with a scope that should avoid unfortunate comparisons with series like *Forza* – an observation several critics made with *Reincarnation*, Buckland notes. The new game is a six-on-six shooter with cars: a kind of weaponised *Rocket League* crossed with *Quake Arena*, with its vehicles boasting omni-directional

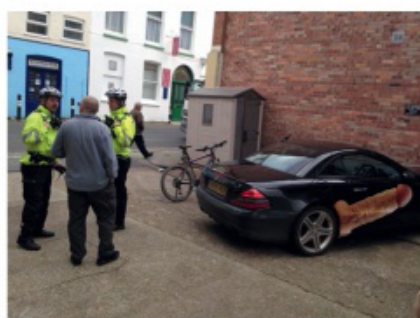
"SHOCKRODS IS ENTIRELY SELF-FUNDED... AT THE SAME TIME WE'RE DOING HIGH-QUALITY WORK FOR OTHER CLIENTS"

about at the peak of its popularity, and *Reincarnation* passed its relatively modest target with room to spare. But a combination of the studio's ambition and issues with its own tech resulted in performance issues when the game belatedly emerged in 2015.

An updated version, called *Max Damage*, released a year later. "We continued to develop what we'd released as *Reincarnation*, which we'd been trying to do with a limited team and a limited budget," Barnden says. "We then got further investment from outside to develop it into *Max Damage*, so our Kickstarter backers eventually got two games for the price of one. It became a far better game, which addressed those performance issues and also made it a much more rounded and polished product." But by then the studio felt it had taken the series as

wheels, a double-jump and a mid-air boost – as well as large guns strapped to their roofs. The aim is to build a game that's accessible but with a high skill ceiling, and the reaction it's received so far from closed beta players has been extremely promising.

Stainless has plenty more irons in the fire, too: another unannounced CCG, a VR game and one more project it's not yet allowed to talk about. Buckland thinks it's prudent to split responsibilities between its own ideas and work for hire. "It's working really well. Our corporate model is to try to have that 50:50 – *ShockRods* is entirely self-funded so we can get higher returns, and it's very much our baby. At the same time we're doing high-quality work for other clients." There's a little extra emphasis on his final two words. "With royalties." ■



1 From left: creative director Shaun Smith, CEO and co-founder Patrick Buckland, COO Matt Edmunds and game director Neil Barnden.

2 Buckland: "We had a rule for the *Carmageddon* games that if it wasn't funny it didn't go in. No violence for violence's sake. We likened ourselves to Tom And Jerry."

3 "We've never considered moving from the Isle Of Wight," Barnden says. "We find that once here, people realise why that's the case."

4 Of the team of eight that started work on *Carmageddon*, five are still at Staines.

5 Though THQ Nordic now owns it, Buckland hasn't ruled out returning to *Carmageddon*.

6 A selection of robot pilots from new project *ShockRods*.

7 Buckland says: "We did between 150 and 300 SKUs for *Magic* over ten years and didn't miss a single deadline"

PLAY

REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Mario Tennis Aces Switch

Nintendo's commitment to free DLC for firstparty titles has borne particular fruit with a game that's now much better than it was at launch. Pauline and Kamek are the latest additions to a significantly larger roster, while online matches are more consistently stable. If you were the opponent we beat with a backhand trick-shot winner after a 25-shot rally: no, we're not sorry, and yes, we're showing the replay to everyone.

Skullgirls: 2nd Encore PS4

Babes in the wood, we are not. We know better than to return to *Skullgirls'* online mode, where opponents blessed with terrifying reaction times and endless free time dish out ego-busting beatings. No – instead, under the guise of showing off the art style, we take several smugly instructive rounds off a *Mortal Kombat*-obsessed friend with our still-impenetrable wall of Eliza/Valentine/Ms. Fortune. It's basically philanthropy, we figure.

Dark Souls II PS4

Going back to *Souls* puts into stark relief just what a departure from the FromSoft template *Sekiro* represents. Put simply, this was like swimming through bricks. Looked down upon by the *Souls* community, *Dark Souls II* has actually aged rather well, and its trio of DLC expansions rival the best of FromSoft's creations. We don't stay for long, though. There's grappling to be done.

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Explore the iPad
edition of **Edge** for
extra Play content

Tbur guidelines

Tom Clancy's The Division 2 (p108) is set in a ruined Washington, DC. Regular visitors to Ubisoft's open worlds, after more of the publisher's brand of digital tourism, be warned: there's little opportunity to gawk at the sights. The streets are paved with danger. Failing to keep your eyes on the road in front of you is asking for trouble, and the game is only too happy to oblige your request.

It's exhausting, honestly, and while there's a fine tension to your first sorties into new areas, as you stalk around trying to keep out of sight until you can unlock a safe house's fast-travel point, getting into trouble is too easy, and getting out of it often too hard. Thankfully, this month's Play crop yields some games where escaping danger is a key component of the designer's plan.

The titular protagonist of *Sekiro: Shadows Die Twice* (p104) can run from trouble like no other. Blessed with remarkable footspeed, it's never been easier to get out of Dodge in a FromSoftware game. Yet the real thrill comes from a grappling hook which lets you zip in and out of the fray, whether that's to create space to quaff a healing potion or to break an enemy's line of sight before taking a stealthier tack. It's a wonderful change for the FromSoft formula that sets the studio's level designers free after all those leaden-footed *Dark Souls* warriors.

Nintendo games are often thought of as occupying the opposite end of the difficulty spectrum. But still, small hands need help. *Yoshi's Crafted World* (p112) is delightful for many reasons, but special mention goes to its Mellow mode, which endows our hero with a permanent pair of wings. It doesn't make the game unfailable, but nor does it insist that more explorative types play perfectly. Ultimately it's about flexibility, switching between fight and flight as we see fit. So, Ubisoft, if it's okay with you, we'd like some jetpacks.



Sekiro: Shadows Die Twice

Every time we boot up *Sekiro* and see the Activision logo, we think someone must be having us on. This is an absolutely ridiculous product of the house of *Call Of Duty*, a game of such frequent and frightening difficulty that it risks turning off even the most avowed students of Hidetaka Miyazaki's work. At its worst, it can feel like a game made entirely of difficulty spikes. At its best, it provides a thrill unequalled even by the rest of the Soulsborne canon. Throughout, it is the least Activision product to have come out of Activision in decades, for better and worse.

Yet, as in *Call Of Duty*, it is all about using a red dot to line up kills. In *Sekiro* one appears over an enemy's chest to signify the availability of a Deathblow, which instantly kills rank-and-file foes regardless of their remaining health, and strips a sub- or main boss of one of its multiple health bars. Its arrival is a signal that you've done your job, the reward either a surge of dopamine or irritated relief, depending on how long you've been stuck on the fight in question.

Health bars still matter, mind you; deplete an enemy's entirely and the Deathblow icon will appear. But vitality is second here to posture, a new idea from FromSoft that combines elements of the *Souls* games' health, stamina and poise, and gives *Sekiro* its mechanical metronome. An enemy's posture bar fills as you inflict damage, make them block attacks or deflect their blows with a well-timed press of the guard button. It decays when you leave them alone. If *Bloodborne*'s Regain system, which let you recover recently lost health by going on the attack, encouraged you onto the front foot, *Sekiro* practically insists on it. Miyazaki's previous games have often punished over-commitment. *Sekiro*, by contrast, revels in it.

It's a wonderfully animated game, and everything you need to know is expressively communicated by the way your opponents move. This is essential given the importance of deflecting incoming blows rather than simply blocking them, which reduces their impact on your own posture bar (you'll be stunned if it fills entirely). Some attacks come out quickly, others at a snail's pace, and mastering their timing, and that of your response to them, is essential. So too are the counters to unblockable moves, signified by an ominous sound effect and a large onscreen kanji. Grabs must be dodged; sweeps can be jumped, with a second button press kicking your foe in the head for heavy posture damage on the way back down; and thrusts are dealt with using the wonderful Mikiri Counter, which sees *Sekiro* stamp on the incoming blade.

Fights are puzzles, then, a question of identifying the next threat and dealing with it. That's nothing new to *Souls*, but here it plays out at three times the speed and gives you very few opportunities to slip up, particularly early on. For all the claims pre-release that

Developer FromSoftware
Publisher Activision
Format PC (tested), PS4, Xbox One
Release Out now

Individual enemies hit like a truck, and groups like a meteor, and mistakes are usually fatal



Activision's massmarket nous had helped FromSoftware improve its onboarding process, this has the most punishing beginning of any of the developer's games to date. Individual enemies hit like a truck, and groups like a meteor, and mistakes are usually fatal. In *Dark Souls* you begin with five swigs of your restorative Estus Flask; here you start with only a single glug of your Healing Gourd.

It is brutal stuff from the off. And while it gets notionally easier over time – your health bar extending and attack power increasing, your flask growing in capacity and your skillset expanding across multiple new tools and skill trees – that only helps if you win, since progression is intrinsically linked to actual progress through the game. Your core stats are increased with Prayer Beads, rare items dropped almost exclusively by sub-bosses – and you need four of them per upgrade. Memories, acquired after beating main bosses, are required to increase your attack power. This is a fundamental shift in the Soulsborne rhythm: if you're struggling, you can't simply go off and farm some mobs for XP to level up your stats, or materials to power up your weapon. You can acquire skills with XP, but none make you more physically powerful, just more potentially so. If a boss kills you in three hits, the skill that gives you health back after a successful Deathblow means nothing. All you can do is learn how not to get hit.

None of this is bad, necessarily. Miyazaki's games are built on a deep respect for the player and their abilities; here, as before, persistence and practice will eventually win the day. But the removal of the old FromSoft safety nets – there's no way of summoning online help either – mean there's no brute-forcing your way past an encounter you're struggling with. It is not just Miyazaki and FromSoftware's most difficult game to date, it's also its most limiting. You learn to play by its rules, or you leave.

Naturally, we have a professional obligation to the former, though we come close to abandoning it in favour of a simpler vocation, such as brain surgery. But it is well worth perservering. Once you've got your head around it all, this is far and away the best combat system From has devised. It's an instant classic even within its new genre, with a rhythm all of its own, all fiercely clashing swords and clanging sound effects, momentum swinging back and forth like a pendulum as good decisions and mistakes are made, initiative seized or lost in a heartbeat. Victories are all the sweeter, not only because of how hard you've had to work for them, but how good you looked, and felt, while doing it.

It might click for you after two hours, or 20, or never. Until it does and for some while thereafter, you'll be tremendously grateful for the addition of stealth, since instant unseen kills let you effectively delete that ►



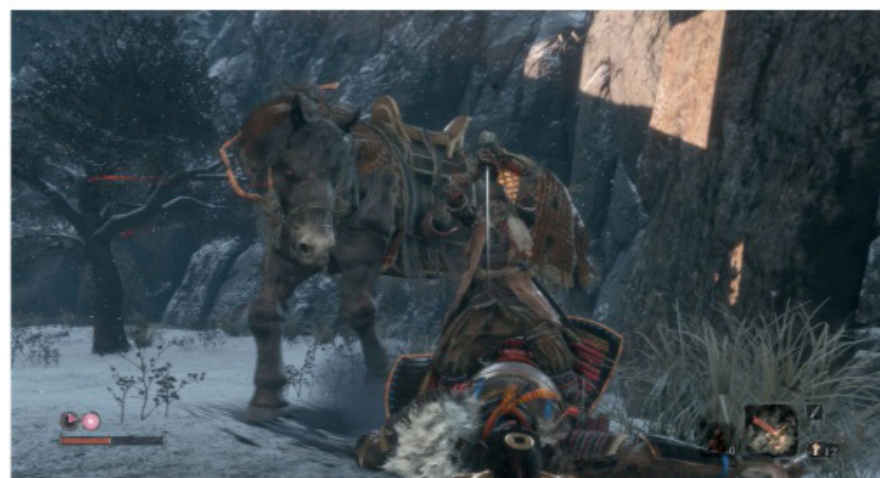
LEFT Hirata Estate is notionally an optional area, though you'll find a couple of tools for your Shinobi Prosthetic that make bosses on the main path a little easier to beat.

BELOW Boss battles end with a flourish, a final Deathblow icon appearing before Sekiro can administer the real killing blow.

MAIN It's a handsome game in places, the graceful elegance of classical Japanese architecture offering far more natural beauty than a *Souls* game or *Bloodborne*



ABOVE One boss fight is a complete departure from the FromSoft template. You must stealth-kill four monkeys, each with a different sense souped up; if one spots you it'll alert the others, and all four will reposition themselves

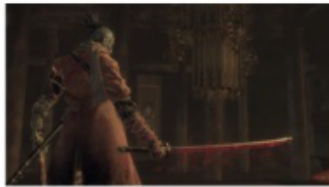




baffling combat system from the game. A delicious, *Arkham*-style grappling hook lets you zip out of trouble when spotted, running away to de-aggro enemies before sneaking back in. The effect on level design is marvellous; areas feel smaller than those of Miyazaki's previous games in terms of square footage, but are much more open and vertical, with grapple points and stealth-supporting level furniture empowering a flexible, improvisational approach. And if it all goes horribly to pot, you can simply leg it: many chokepoints can be bypassed entirely.

Sadly, while the level design is delightful, the reduced overall size of each area means that it often doesn't feel like there's much of a game in between the boss fights, of which there are dozens. And the better you get at the game, and the easier the rank-and-file become to deal with, so the pacing suffers further. You'll always have multiple options of where to go next, but all this means in practice is deciding which of three bosses you want to spend your evening dying to. In a *Souls* game or *Bloodborne*, reaching a new area is a thrill: a step into a cruel unknown filled with new enemies, terrifying blind corners and alluring loot pickups. In *Sekiro*, the only real trepidation comes from not knowing if you're two minutes from your next brick wall, or 20.

Sculptor's Idols, the game's equivalent of the *Souls* games' bonfire checkpoints, are simply everywhere, and many of them feel arbitrarily plonked down. On the rare occasion that you find yourself a single hit from death with an empty flask, there's no real tension since you're likely only a few minutes away from the idol you spawned at, and a sprint away from the next. And while there are plenty of FromSoft's signature shortcuts, we have yet to find a single one that matters. Yes, there's a



BACK ONCE AGAIN

Much was made pre-release about the Resurrection mechanic, which lets Sekiro get up after a fatal fall. While it can be useful against rank-and-file enemies – who sheath their swords and turn their backs on your corpse, allowing you to get up unseen and exact revenge – bosses know what you're up to. They simply stand over you, daring you to get up, meaning there's no real advantage to be gained from it. Once used, Resurrection can be restored by resting at an idol, and more revives can be acquired by killing enough enemies without dying; if only there were more of them in between all the boss fights. Unusually for FromSoft, it feels like a bit of a gimmick, all told – honestly, we'd prefer an extra swig of our health gourd.

Your resurrection power comes from the blood of his young charge, Kuro. It's the focal theme of the story, which is especially damning of a chapter of Buddhist monks who abandon their faith in search of immortality

thrill in opening a one-way door and finding yourself back at an earlier area, seeing how the world fits together. But that's all you get.

Still, the world at large is beautiful, beguiling and full of variety, from an idyllic mountainside monastery to a mist-enveloped forest, a glorious castle fortress to a palace of water and cherry blossom. It may not fit together as elegantly as its spiritual predecessors, but it's a fascinating place, and Activision's helping hand is evident not only in its beauty – this is comfortably From's best-looking game to date – but also its storytelling, which while retaining the fractured-lore structure of *Dark Souls* and *Bloodborne* is much more explicit in its main narrative. The story is told through frequent cutscenes and lengthy in-game dialogue exchanges, and is much easier to understand as a result.

Comparison to From's previous work is inevitable, yet also unfair to a degree, since *Sekiro*, for all its similarities, wants to be something very different. And it certainly is. Yet dozens of hours later, we're still not sure how we feel about it. It is a game of contradictions, open and flexible in its level design, yet resolutely strict in its combat. When things are going your way – on those magical evenings where bosses fall like rain in a flood of upgrades and new toys – it will feel like your new favourite FromSoft game. When you switch off for the night having done nothing but die to the same thing time and again, knowing you've no option but to keep going, you'll wonder why you bother. It is a brilliant game, that is certain. But it is often a difficult one to truly love. Naturally, we can't put it down.

Post Script

Sekiro has players calling for an Easy mode. Has FromSoftware finally gone too far?

Hidetaka Miyazaki has made some of **Edge**'s favourite games of all time, but for all that his output sits among the best of what this medium has to offer, in many ways it also embodies some of its worst traits. There is often a certain sneering elitism associated with his games, as if their devotees belong to a special club, only for players of pure blood and elite skills. The 'git gud' meme is one of gaming's most wearying. *Sekiro* frequently feels like it is embracing it in a way none of its spiritual predecessors did.

A hot-tempered debate sprung up online shortly after *Sekiro*'s release, after it was suggested that perhaps Miyazaki's games should come with a difficulty setting. To the elitist crew, that was heresy, and in fairness you can sort of see their point. The reason FromSoftware has transformed from the *Armored Core* team into one of the world's most revered studios is because of the respect its games have for their players; in an era where so many new releases are terrified of the player getting stuck, and go out of their way to make things as straightforward as possible, a game that is unafraid of making you struggle is a precious thing indeed. The thrill of a Miyazaki game is watching as something that once seemed impossible finally dies to your sword, axe or staff. The journey to triumph is long and painful, and all the more rewarding for it.

Think of the hardest struggles in your own personal Soulsborne journey. When you were bouncing your head off Ornstein and Smough, that infamous *Dark Souls* roadblock, night after night, what if the game suddenly offered to drop the difficulty level for you? Would you have taken it? We think we might have, honestly, especially if we had a review deadline breathing down our necks. Say you agreed, and then won first time. Would you feel the same thrill you normally do from finally overcoming a FromSoftware boss? Or would you feel like you'd cheated a bit – and had in turn cheated yourself out of one of the finest feelings gaming has to offer?

This is the central argument against the notion of adjustable difficulty in FromSoft games. Yet it also overlooks the fact that, until now, the studio's work has effectively let you adjust the difficulty on the fly. Spend an evening running laps of a well-known XP farm and you can overlevel yourself for the fight you've been struggling with. Go on a titanite scavenging mission and you could upgrade your weapon; spend your rank XP smartly and you could make it more powerful still by levelling the character stat with which your weapon's damage scales. Certain items and spells can buff your weapon even further (and many enemies have elemental weaknesses to exploit). If all else fails, you can summon

Miyazaki games have long had a sort of adjustable difficulty; they've just made you work for it



a couple of helpers. Sure, the boss will have more health, but there'll be three of you.

In other words, Miyazaki games have long had a sort of adjustable difficulty; they've just made you work for it, which is entirely in keeping with the spirit of the thing. Similarly, it's appropriate for *Sekiro* to work alone, since that is the shinobi's way of life. He is a lone warrior serving a sole master, and any co-op summoning would cleave the game's fiction in two with a sharp katana. Yet by opting to make a pure action game, rather than an RPG, From has also ripped out all the other ways previous FromSoft titles let players tip the odds in their favour – there's no levelling, no weapon upgrades and if you want to raise your stats, you have to beat those bosses. Some of the most beloved games in this genre have customisable difficulty, and their reputations have not suffered (one of them has two **Edge** 10s under its belt). But *Sekiro* stands firm. The result is all the more thrilling when you're winning, but when you're not it can be crushingly demoralising.

The result is that, logically, players are more likely to bounce off *Sekiro* than they ever were to abandon *Souls* or *Bloodborne*. And, anecdotally at least, it seems there is more than one likely point in the game at which people throw their hands up, put their pad down and walk away. The most common is Genichiro Ashina, a boss who sits at roughly the halfway point of the game and is effectively an exam, ensuring you've learned all you need to before the game will let you pass into the *real* hardship. It is the point at which the game either clicks or comes apart for players. But we know of several *Souls* veterans who didn't even get that far before giving up on the game. That in itself suggests something isn't quite right.

That review code was only made available 72 hours before launch implies FromSoftware wanted as much time as it could have with the game; perhaps it could have done with a little longer to fine-tune how much it asks of you. The developer has, in the past, trod lightly when it comes to post-release patches, yet we wonder whether it might think differently this time around. For all the delicious irony in From partnering with one of the world's mightiest publishers to make its hardest game to date, we can't help but suspect that this wasn't *quite* the plan all along. And if it was, Activision might have something to say about it. But if patches do follow, we'd be surprised if difficulty settings were added as part of that. And, to be honest, a little disappointed if it did – not because it would mean one of this industry's most revered creators compromising the purity of his vision, but because we just don't trust ourselves not to use them. ■

Tom Clancy's The Division 2

Washington, DC, seven months after the outbreak. Most of the population have broken off into highly organised militarised factions; a few are trying to rebuild society amid the overgrowth and piled-up bin bags; and we are notionally on the side of the good guys, but mostly here for the sweet yellow guns and to very precisely lob sentry turrets onto the tops of cupboards. And burnt-out cars, abandoned shipping containers and upended fridges. This is a notionally serious game about a serious subject. But as we spend the opening salvos of yet another firefight carefully arcing a turret on top of a filing cabinet, we realise we aren't treating it as such.

Neither is Ubisoft Massive, in fairness. Setting a loot treadmill in the plausible wreckage of a fallen society is ultimately a flawed concept; one of those things is always going to be undermined by the other. So it proves. Massive has, if not nothing, then certainly very little to say about the setting and themes it presents. Much has been made of this perceived missed opportunity, and that is fair enough. But it is not what we are here for. Fifty hours later, with the damp fart of a story long gone, *The Division 2*'s Washington is simply a backdrop; it is *Destiny* with real-world landmarks, *WOW* in a city piled with trash. This is a fine loot game and an often-sumptuous shooter, and once its story gets out of the way it is a heck of a world, as well.

It's seven months after the outbreak; an odd sort of timeline, reflecting neither the initial chaos nor the sense of a world emptied and part reclaimed. Yet where this Washington succeeds is in its portrayal of a city, and a people, that is coming to terms with what has happened, and what must happen next. There are hints at a society on the mend in settlements that, as you progress, expand to include schools and greenhouses, water systems and concert stages. But you are never more than a street corner or rusting stairwell away from a still-contaminated tower block or a man dead, upright on his sofa, his dog at his side. On the hunt for a collectible, we see an apartment door adorned with a withered wreath. The outbreak hit seven months earlier, at Christmas time. As a place, Washington lacks the magic of a wintry New York, but as a playground with the odd emotional sucker-punch it works well, providing you tune out during the cutscenes.

The real star of the show, unusually for a Ubi open world, is the combat. And, surprisingly for a loot game, that is not just a question of the perks on your gear, though it's certainly part of it. Enemy AI has been greatly improved, and while your foes will occasionally lose their minds individually – the elite that climbs on top of a table so your turret can shoot it up the bottom, the grunt that shouts "Moving to their flank!" before running across open ground, right through your reticule

Developer/publisher Ubisoft (Massive)
Format PC, PS4, Xbox One
Release Out now

Setting a loot treadmill in the wreckage of a fallen society is ultimately a flawed concept



LEST WE FORGET

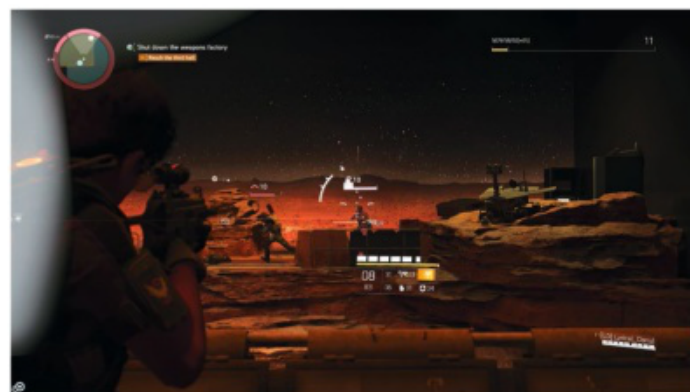
For all the gently evocative world-building going on in *The Division 2*'s Washington DC, there are moments where Massive, for some reason, reaches for the sledgehammer. In the opening hours, for example, you'll find George Washington's sword lying next to a corpse. Later on, during a side mission that introduces us to one enemy faction's love of fire grenades, we happen upon Teddy Roosevelt's childhood teddy bear, hidden with an audiolog in a shipping container. Famous paintings worth tens of millions lie in ruined corridors, offering chunks of XP for their discovery. It's daft, though hardly ruinous. If it's the latter you're after, a suite of collectible videologs veer uncomfortably close to snuff flicks, their attempts to show a society gone wrong coming off as almost fetishistic.

– when working as a group, they make for some of the most satisfying opponents we've faced in years. They move intelligently, know when they're in trouble, and know how much you like hunkering down in cover. Like the best videogame AI, they make you feel smart for having seemingly outsmarted them. It's wonderful.

And underpinning all that is the loot game, which understands the fundamentals of the genre and builds on all Massive learned from its first go around; not seeking to rewrite the rulebook, but improve it. Perks, or talents as the game styles them, arrive early on, and inform your loadout decisions and playstyles. By the time you get into the endgame – where guns and gear can roll with up to three talents apiece, and the reconfiguration desk at your base of operations lets you transfer perks between gear pieces – the build options are dizzying. The loot flies in, too, dropped by the fallen hordes, advertised as mission rewards, or found by burrowing around in storefronts, foliage and abandoned apartment buildings. For all that we often wish Ubisoft wouldn't fill its worlds with so much *stuff*, it's a benefit in a game built upon the acquisition of things.

Remarkably, that sense continues well into the endgame – something Massive admitted it didn't get right until long after *The Division*'s release, but which it has nailed here at the first time of asking. The entire makeup of the city changes, overrun by a new and far more technologically advanced faction. As is typical, you must now replay missions, but the new versions merely share a location with those you played on the path to level 30. The loot game kicks into higher gear with new gear sets and exotics to hunt down; combat takes on a new dimension with the addition of three Specialisations, each with its own signature weapon (.50-cal sniper, explosive crossbow, multi-grenade launcher) and associated skill tree. There's no raid yet, but it's on the way. This is the first game of its kind to not launch with one without feeling like it needs it.

It's not quite a resounding triumph. The story really is miserable; we've seen plenty of bugs and had a couple of crashes; and for all the quality of the world, getting around it can be a pain. Its GPS can be useless. Your character flatly refuses to mantle over low walls that look like they lead straight to your next objective. Enemies spawn everywhere – we've had some appear before our eyes a few times, our sudden death setting us back half a click to the nearest safehouse, forced to run the gamut again on our way to the next mission. But these are small potatoes given the ship-now-fix-later attitude that's so pervasive among games of this type. Well, no longer. This is a case study in how to get it right first time – and, finally, students of this genre will discover what happens when devs don't have to spend the first 12 months of a loot game's life knocking it into shape. For once, the future looks bright.



ABOVE A mission set in the American History Museum is one of the campaign's strongest moments, if only for how daft it is. The planetarium battle is a psychedelic experience that almost feels on loan from *Far Cry*



TOP Now *that's* what we're talking about. Strongholds are long, tough missions modelled on *Destiny's* Strikes, with one significant difference: they fling loot at you.

MAIN You might not have noticed this because it's quite subtle, but *Tom Clancy's The Division 2* is actually set in Washington, DC, home to famous landmarks such as the Lincoln Memorial.

RIGHT There's surprising variety to the environments even before you factor in the post-apocalyptic overgrowth. It's helped by an often astonishing lighting model and some excellent weather effects





Our avatar arrives at her new base of operations, in a game which Ubisoft claims does not set out to be political

Post Script

Ubisoft says its games aren't political – but when viewed through a sniper scope, what isn't?

Far Cry 5 was never meant to be political, the game's story and setting nailed down long before the phrase 'Trump country' had any meaning. That's what Ubisoft would prefer you to believe, at least. Even before globalism was yanked into its ongoing existential culture war, the US had its political dark side, and so *Far Cry 5* – a tale of religious fundamentalists, conspiracy theorists and gun nuts – had political commentary baked hard into its thematic codebase. *The Division 2* follows a similar pattern: it is an inescapably political work that, whether by accident or design, takes on extra layers of meaning given the current state of the world into which it has released.

With these two games in particular, we see a Ubisoft trying to have its cake and eat it, presenting just-about-plausible alternate timelines for modern-day America, then insisting it's not trying to actually say anything about the real world. And then, even worse, carrying through on that promise by shipping games with such vapid narratives. In *The Division 2*'s case the Clancy name doesn't imply so much as guarantee a tale of modern-day military-industrial fetishism; and if we're being unkind, it also suggests the story is not exactly going to be one for the ages. So, in both cases, does it prove.

Yet Ubisoft's position on all this is, to a degree, an understandable one. All art is political, sure, but videogames are products as well as works of art. They need to be sold, and will not sell as well if they appear to thematically alienate people who identify with the 'wrong' political viewpoint. And as Ubisoft management has pointed out before, it is hard for a game made in the publisher's global structure to present a unified political view: when 2,000 people have worked on a game at studios across the globe, it is enormously unlikely that all of them will hold the same views.

In any case, does it really matter? It is hard to imagine what either game could meaningfully tell us about the real world, especially given that their language is one of violence and the binary split between good and bad. In a way *The Division 2*, like *Far Cry 5*, makes the only political statement it needs to when it puts you on one particular side, immediately casting you and those around you as the good guys. Anyone who bats, or snipes, for the other team is cannon fodder, and fair game. Ubisoft can say what it likes about its ultimate intentions, but it picks a side for you in *The Division 2* as soon as you pitch up at the White House and your avatar holsters their weapon.

Moreover, if you find the publisher's current shooter politics distasteful, consider the alternatives. The *COD4* era's tales of ultraviolent derring-do against Islamic fundamentalists belongs to the past. Cold-War Soviets feel similarly played out (and would arguably be a bit too on the nose in a game right now). Gaming has had its fill of Nazi antagonists many times over, and while Bethesda drew acclaim for openly marketing *Wolfenstein: The New Colossus* as a game that let you punch Nazis, it is a very different sort of game to *The Division*; it's a work of fantasy whose last thematic contact with reality was over 70 years ago. *The New Colossus* is, if anything, a less political game even than those on Ubisoft's slate.

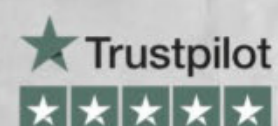
Which, really, is the point. *The Division 2*, like *Far Cry 5* before it, is damned not by its actual politics, but its professed lack of them. The issue is not what got made – though we'd dearly love whatever comes next to have a story worth sticking with – but what was said about it by the senior developers tasked with getting through another round of press interviews without another round of controversy. Politics is just another word for marketing, in other words. If you pretend to be something you're not, when the truth comes out, you risk losing by a landslide. ■



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Yoshi's Crafted World

The sight of a Shy Guy with a knife is one of many signs that *Yoshi's Crafted World* isn't quite the game you'd expect it to be. It's not the first time the masked minion has been repurposed to more threatening ends – the relative few who played *Paper Mario: Color Splash* won't soon forget its creepiest sequence – but here Yoshi also has Ninja Guys, Vampire Guys and Zombie Guys to contend with. By the time a shrieking clown with an axe arrives, it's clear we're a long way from the tooth-grindingly twee *New Island*. It would appear that Nintendo's recent creative injection from younger developers, perhaps less overawed by the company's legacy than their elders, has extended to its secondparty studios. Without trying to reinvent the wheel, Good-Feel subtly questions the conventions of a Yoshi game in a way that feels almost revelatory. The result is a game that redefines the identity of a series that has, until now, struggled to find one.

That in itself is no real surprise. *Yoshi's Island* was, after all, *Super Mario World 2* before the subtitle became its accepted name – though with its focus on careful exploration rather than nimble gymnastics, it was never really a Mario game. Regardless, in pulling out all the stops to close the book on the SNES era, Miyamoto and his team made a game that was almost impossible to follow. How do you improve on a game that, if not perfect, is somewhere in the vicinity? The answer so far, essentially, has been to make it again, to inevitably diminishing returns. *Yoshi's Island DS* was the kind of slavish homage you'd expect from a fan remake, while to suggest the tepid *New Island* was the *New Super Mario Bros* of the series would be generous in the extreme, if indicative of a similar lack of ambition. *Woolly World* was an improvement, but Kirby had already gazumped Yoshi when it came to creative yarn-spinning.

Crafted World, at first glance, seems to be following a similar path, but soon strays from it. Yes, Yoshi still gobbles up enemies and turns them into egg missiles. Your goal is still to reach a stage's finish line having collected as many smiling flowers and red coins as possible – ideally while retaining the full 20 hearts of your health meter. But the aiming reticule no longer moves automatically, and is no longer confined to a single plane. Critical and optional targets lie in the foreground and background – and thanks to Unreal Engine 4 physics, some can be juggled with successive hits for bonus coins. Train rides and plane journeys see the camera pivot around for a more dynamic viewpoint while daisy-grabbing minigames briefly flip the level for a peek behind the facade. Later, you'll get a longer look at those milk cartons and cookie boxes as you chase after a trio of woollen pups against the clock, this time heading back to the start. Rarely has a 2D game felt quite so three-dimensional.

Developer Good-Feel
Publisher Nintendo
Format Switch
Release Out now

You find yourself anticipating the next stage because chances are you'll see something out of the ordinary



PAPER BACK

In keeping with *Yoshi* tradition, a chalk flower is scribbled on the results screen when you've fully completed a stage, but there are more incentives to return. Boss challenges invite you to beat them within a time limit and without taking damage, with a bonus objective for completing a specific task mid-battle – and those extra daisies will come in handy for a certain post-game bonus. You'll also get them by finding hidden robots and fetching souvenirs, while the extra coins you pick up can be fed into capsule machines which yield a variety of cardboard costumes for Yoshi. These let you take more hits before your health depletes (one hit for the more common outfits, up to five for the rarest) which makes them ideal as a subtle difficulty modifier for younger players.

And rarely has a Nintendo game felt so inspired by other games. The influence of Media Molecule is obvious, and while Good-Feel's look-but-don't-touch attitude is a disappointment after *Tearaway*'s more hands-on approach, it arguably makes even better use of its handmade aesthetic. Its world doesn't look as if it was made by adults with Etsy stores, but rather kids under parental supervision. Spin the island on the title screen and you'll see sticky tape holding up pieces of cardboard that are unpainted on the reverse, alongside a pair of discarded safety scissors. Later on you'll find crumpled bits of paper in the background, like aborted designs tossed aside. There are creases and scuffs; in a snowy world, icy patches are represented by streaks of blue paint, some of which still look tacky, as if applied a little too thickly. Anyone who's ever done a craft project with kids will know how often they get bored before it's done, and so you'll see elements that have been dashed off or left unfinished. One one stage, the cardboard trees that mark the goal, usually lovingly painted, are shown as plain cardboard tubes with scrunched-up newspaper on top. (Fittingly, it's the mad clown stage, suggesting the child was too scared to stay any longer.)

In that regard, *Crafted World* taps into the anything-goes spirit of *Yoshi's Island*, where you find yourself anticipating the next stage because chances are you'll see something out of the ordinary. Though there's nothing as unforgettable as *Touch Fuzzy*, *Get Dizzy*, say, there are plenty of surprises – and not only in visual terms. One stealth level is reminiscent of *Playdead's Inside*, of all things, while its shallow-focus outdoor locations capture a similar idyllic feel to *Unravel*. In one change from the usual sedate pace, you'll find yourself in a circus swinging through hoops against the clock. Then you'll engage in shadow play behind scrolling shoji screens before a solar-powered race forces you to stay in the light. A stage with cardboard-box elevators and bottle-top switches becomes a sliding-tile puzzle, then a mini-boss battle. And after a low-gravity jaunt that nods to *Mario Odyssey's* trip to the moon, you'll find yourself aboard a space station on red alert. Here, friendly robots suddenly become hazards and platforms spin faster whenever a meteorite hits – with vibrations from the controller warning you of its approach.

In light of such creativity and craft, its few flaws are forgivable. You won't always know before tackling a flower challenge that you need a certain number of eggs to finish it. And since aiming can be slightly sluggish – with the reticule snapping to targets like a magnet, it drags slightly when you try to pull away – some time limits and par scores seem a little strict. But like the errant creases, scribbles and splodges of paint, these are minor blemishes. A series that has spent too long paying bashful tribute has, at long last, emerged from the shadow of its classic debut.



ABOVE The auto-scrolling stages are the ones you'll most likely need to replay to earn 100 per cent. On Mellow mode – which lets Yoshi hover as long as you hold jump – you'll get a visual clue when a flower is nearby



MAIN Occasionally the red coins are a little *too* well-hidden; locating the final three on Spring Sprung Trail here took us a good while. The swaying origami flowers make the return trip worth it.

ABOVE The soundtrack adopts a similar approach to previous *Yoshi* games, reusing motifs and melodies while shifting styles. But it's less irritating than in *New Island*, and differentiates its themes better – there are a few orchestral flourishes, while the space levels make fine use of wobbly theremin.

LEFT Finding everything isn't merely a case of heading in the opposite direction, or jumping at the end of a cul-de-sac to reveal an invisible cloud. Here, a ground-pound knocks a flower into the water for a monkey to fish out

Generation Zero

Neat, homely Scandinavian houses lie empty in the moonlight. There are cars, abandoned in the snaking country roads, lights on, doors open, not a soul to be seen nearby. The grass sways in the breeze. On the horizon, flashing lights flicker at an ominous cadence. *Generation Zero* is a beautiful, empty game. So much so that it feels just a few voiceover lines of spoken word poetry away from being a walking sim, although it's unclear if this is the atmosphere Avalanche Studios is going for or not. At its core it's a game about shooting robots in fourplayer co-op, and yet it has an eye for sombre natural beauty and an emphasis on exploring abandoned spaces that feels entirely at odds with that high-octane elevator pitch.

The setting is a very particular vision of 1980s Sweden besieged by robots. The specificity of that setting has proven controversial, since it bears such an uncanny resemblance to the work of Swedish artist Simon Stålenhag, who created a pen-and-paper RPG universe called *Tales From The Loop*. It's a great shame that any enjoyment of the setting is coloured by that underlying grievance, because it's refreshing to play in a world that doesn't feel like it was born in a meeting room and subsequently nursed by focus groups. The world feels esoteric enough that it must mean something to its creators.

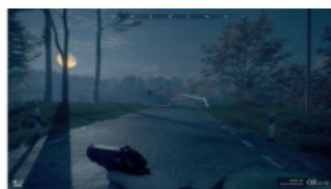
Although narrative exposition's thin on the ground throughout *Generation Zero*, it does at least impart that this rise of the machines has something to do with Sweden's post-war isolationism in an alt-history timeline. Then: silence. Darkness, and an enormous world map populated only by four human players and untold mechanical horrors. If the expectation is that you'll go about *Generation Zero* as you would *DayZ*, gathering supplies and venturing further into the map in order to secure a greater chance of survival, the reality owes more to *Everybody's Gone To The Rapture*. This is a game that aims for stark, and instead comes up feeling empty.

The flickers of environmental storytelling, for example, are so sparsely apportioned across its vast world map that it's very difficult to keep the narrative thread in mind between finds. It might be two hours before you even find a voice note, at which point the discovery feels especially poignant – if you're playing solo, it's probably the first voice you've heard all game. Written notes, too, are fantastically rare, and generally don't peel back the layers of *Generation Zero*'s central mystery any deeper than alluding to a disaster that caused the human population to take flight.

Story isn't the chief hook here, then, you might think. But the familiar survival mechanics you'd expect from a game of this size and freeform design are absent too. Those nagging, ever-diminishing bars

Developer Avalanche Studios
Publisher THQ Nordic
Format PC, PS4 (tested), Xbox One
Release Out now

What's missing throughout is any sense of why you're doing what you're doing, or why you'd want to continue



APEX PREDATORS

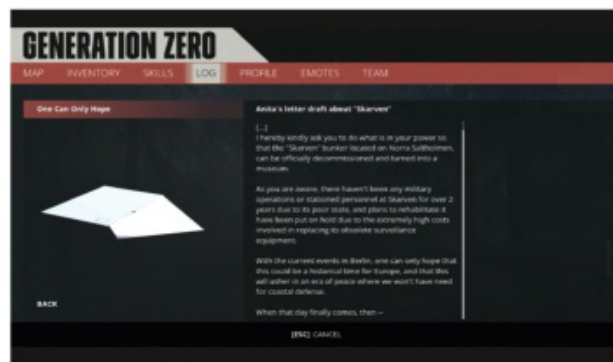
One aspect of *Generation Zero* that withstands all scrutiny is its Apex game engine. Although it places stern demands on a GTX 1080 at resolutions beyond 1080p, the way it captures the subtleties of different lighting conditions and weather effects throughout each day-night cycle is worth stopping and gawking at. It may share an engine with Avalanche's recent *Just Cause 4*, but the visuals bear little resemblance to that bombastic adventure. Colours are muted to the point of photorealism, and every sprig of Scandinavian shrubbery seems to have been placed with love and attention. The engine's able to animate the predators of *Generation Zero*'s world unnervingly well, too – robots undulate and gallop, staggering for balance when attacked. Such detail is, however, jarring in a game that feels so sparse elsewhere.

indicating hunger, thirst, warmth and the like simply aren't there. That might seem like a liberating boon, and under most circumstances it would be. But in the space *Generation Zero* frees up, in which you don't have to search for berries or figure out how to craft a device, it has little to fill it with instead.

The vast majority of your time is spent moving, on foot, to the next nestle of buildings, shooting any and all robotic adversaries you encounter along the way. The design of the six robot types is aesthetically considered and satisfying to watch in motion, one variant owing a lot to the infinitely horrifying Boston Dynamics dog, but it doesn't force particular tactics or constraints in combat. There are weak points to exploit, providing the non-human equivalent of a headshot, but despite the potential for strategic depth its fourplayer co-op setup offers the approach is uniform: aim, fire, move on. Pistols, shotguns and rifles all lie waiting to be stuffed into inventory screens, along with scopes and attachments and a generous swathe of cosmetic items. A basic upgrade tree sits within a basic character menu and offers basic perks such as hip-shot accuracy and reload time. But what's missing throughout is any sense of *why* you're doing what you're doing, or why you'd want to continue. The most compelling answer is that there's simply more map to explore, and bigger robots to fight just beyond the horizon. In a different game, that simplicity of design and downright opacity in storytelling might have worked. It didn't do *Dark Souls* any harm, after all, but Avalanche doesn't offer anything like such an immaculate combat loop to fill the space that exposition or fetch-quest busywork usually occupies in games.

So sparse is the experience that it takes about four or five bewildered hours for the reality to sink in that yes, this is all there is. An Early Access game that isn't; a new entrant to that burgeoning new massive-but-empty-online-shooter genre of which *Fallout 76* was a recent pioneer. It seems deeply plausible that *Generation Zero* began life as a totally different game, perhaps within a different genre, and had to be pared back within a ruinously short window of time.

And yet, it's certainly not an unlikeable game. You start to feel like a level archaeologist, exploring a forgotten world and imagining what might once have been here. As day-night cycles roll beautifully into each other and a rainstorm beats against the windows of whichever Scandi farm you're holed up in with your comrades, *Generation Zero* very nearly justifies itself as a shared-world exploration piece. But it obviously intends for you to play for much longer than this effect lasts, tens of hours after the atmosphere departs, just to max out some upgrades trees in the battle against – well, very little.



ABOVE The way *Generation Zero* wilfully keeps you at arms' length from the details of its mystery keeps you engaged in the enigma, but its scraps of storytelling are rationed a bit too tightly



TOP The most interesting thing this box might contain is a new jacket or a pair of sunglasses, which says a lot about this game and the industry that birthed it.
MAIN *Generation Zero* shares an engine not only with *Just Cause 4* but open-world hunting sim *Hunter: Call Of The Wild*. Its knack for creating bucolic wonder is perhaps best deployed in the latter.
LEFT Although broadly feasible as a solo game, there are the odd nooks and crannies in the map that feel designed for two or more players, and thus flatten you with sheer volume of enemies

The Walking Dead: The Final Season

Lives are brutally cut short all the time in *The Walking Dead*, though when someone's time is up it's usually signposted. Yet we barely got a hint that Telltale was in trouble, until it was suddenly all over – and it turned out it had been in some difficulty for a while, like a survivor concealing a fatal bite beneath its clothes but bravely struggling on. That this final season was finished by Skybound Games, working alongside some of the original team, is apropos for a story that's all about passing the torch – in this case, the lessons and values we try to instil in those we'll leave behind.

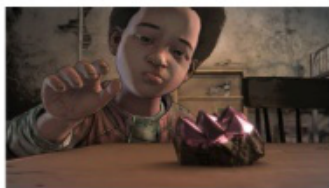
And how tragic that, in the opening episode at least, Telltale appears to be on peak form. An art style that has, at times, felt like a stylistic choice born of technical limitations is at its most refined here, hewing closer to the comic books than ever before. It begins with a smart callback – the first of many – to the debut season, instantly establishing a role reversal for protagonist Clementine. We first encountered her as a timid eight-year-old. Now she's a hardened, pragmatic 16-year-old and a single mother of sorts, with the orphaned AJ as her surrogate son. Her relationship with Lee in Season One isn't simply used as a nostalgic crutch; rather, in nodding to it, *The Final Season* only highlights what's changed. When Clem tries to make AJ laugh, she's doing the kind of thing that would have comforted her as a kid. But he's sullen and serious: what worked for her clearly doesn't for him. The rules of engagement, in every sense, have changed.

That's made all the more apparent when, soon after, they fall in with a group of young survivors – conveniently sheltered within a school for troubled children, though these formerly difficult pupils have learned to adapt to their new world. Clem is delighted and relieved; AJ, accustomed to distrusting others, is not. He's more comfortable sleeping on the floor, and reacts violently to disagreements, and so now she has to teach him to live in a world where his revolver doesn't have to be his best friend.

It's good to see Clementine hanging around with people her own age, not least since it makes sense that this group of teens would seek the counsel of someone with experience of the world beyond their self-imposed boundaries. Meanwhile, a potential romance with one of two characters – a choice that lets you define Clem's sexuality – results in some of the most tender and touching moments of all four seasons. It's not afraid to slow things down for a bit of stargazing, giving Clem some deserved respite. She's had a harrowing time of things, after all, and the developer doesn't go easy on her here either. You could, in fact, argue that we spend a little too much time with her and not enough with the others. An understandable keenness to redefine the player's relationship with her, and establish her new

Developer Telltale Games, Skybound Games
Publisher Skybound Games
Format PC (tested), PS4, Switch, Xbox One
Release Out now

Clementine's story was always likely to conclude in a relatively intimate, personal fashion



SCHOOL TIES

'Safe' is only ever a relative word in *The Walking Dead*, but Ericson's Boarding School For Troubled Youth soon begins to feel like a haven of sorts. Clem and AJ are given their own room which comes with a handy bunk bed – even if the kid is reluctant to use it – and can be filled with collectable knick-knacks you'll find on your travels, from Etch-a-Sketch toys to cow skulls and mysterious crystals. It's an incentive to explore more thoroughly when you're not in any immediate danger, though in some ways it's a missed opportunity: since each object has its own specific slot, it never quite feels like you're making the place your own. Perhaps that's why a late return doesn't quite feel like the homecoming it should.

role as a parent, unfortunately gives a few of the supporting cast too little screen time to register.

Nevertheless, the storytelling keeps finding ways to put a fresh spin on old ideas. We're given a new perspective on the undead from two characters, in one case leading to a tense set-piece that becomes strangely moving. And if some of its finest drama comes during quieter moments, its action set-pieces (of which there are several) are more cleverly staged and dynamically shot – and better served by an engine that, at last, feels up to the job. A few old habits die hard. Some clumsy captions in the final episode go beyond the usual acknowledgement of how our choices affect others: during a pivotal moment, you can't help but think the developers should have found a better way to handle this by now. And though it does its best to convince you Clem is in genuine peril, the knowledge that there's no real way to fail – after a short, grisly death scene, you're taken back to a checkpoint that triggered just seconds before – is a reminder that in these moments you're no more than a stunt double missing their cues.

It's hard to say whether or not a few late-game stumbles have anything to do with the change of developer; Skybound has suggested the script didn't deviate from the original plan, and the third episode certainly doesn't seem to suffer. Its thrilling, action-packed climax extends into the fourth, but Clementine's story was always likely to conclude in a relatively intimate, personal fashion, and so it proves. Still, one late decision in particular feels like a glaring miscalculation. There's a scene where an obvious option is inexplicably, exasperatingly taken off the table, while a subsequent development leaves you not so much feeling misled as outright lied to. It's enough to take the shine off what could have been the series' crowning moment. Elsewhere, an opportunity to make a more meaningful connection with its past – explored in previous episodes – is ignored, in favour of a powerful but oddly timed flashback which belatedly explains AJ's desensitisation to violence.

For all that, the finale will still leave plenty of players choking back tears, even if that's mostly thanks to four seasons' worth of groundwork from the writers and actor Melissa Hutchison, who's never been better as Clementine. And if those final moments demand a serious suspension of disbelief, the last image we're left with feels like a fitting way to wrap things up (albeit one a high percentage of players would likely guess). In some ways, it feels like the end of an era, even if Telltale has already passed the torch to developers who've been influenced by – and learned from – its biggest and best series. Heaven knows we've played thousands of forgettable videogame stories over the years, so perhaps the best tribute we can pay to the departed developer is this: **Edge** will remember it.

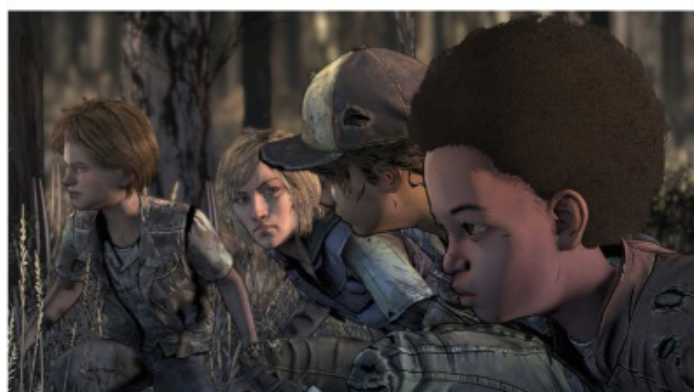


ABOVE Clem's such an old head on young shoulders that you forget she's inexperienced in matters of the heart. The first flutterings of romance she experiences with either Violet or Louis feel authentically tentative.

LEFT The short recaps before each episode (overlaid with Hutchison's narration) are a fine idea. If you don't have a save from past seasons you can determine Clem's backstory by picking from a selection of the series' biggest decisions



BELOW As ever, the action sequences aren't difficult, but they do convey a sense of tension and physical exertion. This being the end of the story, one way or another, the stakes feel higher



ABOVE Clementine keeps checking to make sure AJ remembers her rules throughout the season, which feels as much for the player's benefit as the kid's – a way of reminding you that the game is listening and adapting



Dangerous Driving

Developers who leave larger studios to go independent tend to fall into two categories. There are those looking to start a passion project, something totally different from what they've been doing in their day job for years. And there are others who simply want to get back to what they're good at, without the pressure of a publisher breathing down their neck or the challenges of managing a huge team with too many moving parts. Three Fields Entertainment made its intentions fairly clear with its debut: *Dangerous Golf* was a departure in one sense, but at heart it was *Burnout*'s Crash mode with a golf ball, a game about making an almighty mess on a somewhat smaller scale. After a brief dabble with VR, it made *Danger Zone*, which brought back the cars to Crash mode but put them in a sterile testing facility – and a sequel which sensibly took it out on the open road. *Dangerous Driving* is basically the rest of it – it's *Burnout* minus Crash mode, but with the traffic-checking, breakneck-paced car carnage with which co-founders Fiona Sperry and Alex Ward made their names at Criterion. It extends all the way to the familiar typeface and the 'have you tried...' hints on the menu screen – but, thankfully, not to any annoying DJs.

Then again, and perhaps this is our age, we swear *Burnout* was never quite *this* fast. During the first couple of races of Sedan class – by definition the slowest of the six – you'll wonder if this is going to be sustainable. Hit boost and the world suddenly becomes a blur, as you hurtle along long, twisting highways and almost instinctively lean back, as if the G forces are pinning you to your seat. Arrow signs give you fair warning of corners, though slowing down in time to take them is another matter. Sure, up to a point your car can take a bit of punishment – it can *usually* survive a fairly hefty scrape against the crash barriers, if not a full-on smash – but it's the traffic you have to worry about. It's randomly generated, and so when you're playing catch-up and need to take a bend at top speed, should your back end veer even slightly onto the wrong side during a drift there's every chance you'll plough into a van or coach coming the other way.

But then you'll need to spend a bit of time on the wrong side. Or, rather, the right side; *Dangerous Driving* might be made in Britain, but they don't drive on the left here. And so, to build up your boost meter, you must. At this kind of speed, that's easier said than done. Headlight flashes warn you something's coming, but when you've got five other racers jostling for position, and a low-hanging sun turning regular corners into blind ones, a collision is all but a foregone conclusion.

This is *Burnout* in all but name, though, and crashes are part of the deal. In the brief period immediately following a prang, you can steer your wreck in the hope of perhaps stopping one of your rivals, but since it's all

Developer/publisher
Three Fields Entertainment
Format PC, PS4 (tested), Xbox One
Release Out now

Hit boost and the world suddenly becomes a blur, as you hurtle along long, twisting highways



LET'S GO, MR DRIVER

Though *Dangerous Driving* obviously draws on Ward and Sperry's work at Criterion, Three Fields also pays homage to a racing classic. The terrific Pursuit missions put you in a police car chasing down one or more suspects, ramming them to chip away at a visible health bar, before executing a takedown to bring them to justice – the faster the better, as far as medal times are concerned. It feels just like a modern-day *Chase HQ* – down to the sound effect that lets you know you've taken a chunk out of them – until a Trophy pop-up makes the connection explicit. Indeed, it's a mode that could be expanded should Three Fields fancied it: get a writer involved, hire an artist for a few comic-book cutscenes, and it'd be worth making a phonecall to Taito.

but impossible to ever be more than a couple of seconds ahead, you're best just to focus on restarting and rebuilding that boost. And when you catch up with the pack, you're positively encouraged to smash them off the road. The Crash cam cutaways are back, showing you exactly how your CPU rivals met their end, before cutting back to you a little way down the road, with your boost meter filled and no immediate hazards. But wrecks stay on the road for subsequent laps, so triple takedowns can come back to bite you.

Events are all variations on a similar theme, arranged into classes theoretically increasing in speed – from sedans that are hardly stately to hypercars and formula vehicles with a frankly ludicrous boost speed. At first, it seems to take an old-fashioned approach to progression: everything's locked until you get a bronze in the first race, and that only opens up the next. But then you'll open up three at once – though some specific event types are bound to single events. Each mode is fairly self-explanatory. Eliminator loses the back marker after each short lap, while Road Rage is all about getting as many takedowns as possible within a time limit. The three-race Grands Prix that close out each class (and unlock the next), meanwhile, are classic *Burnout*: lap racing on long roads with a bit of vehicular violence. It's a little scrappy at times, but then *Burnout* always had a punkish spirit before EA took over and sanded off the rough edges. A mere mention of *Point Of Impact* will be endorsement enough for some.

Alas, then we come to the Heatwave races, which is where it all falls apart, and the scrappier moments that could be overlooked in the other modes can no longer be ignored. Here, you can chain boosts endlessly until you crash, though the gauge drains completely when you do. But at top speed, staying clean for an entire race depends too much on the traffic gods being on your side. Wrecks left behind from crashes can leave entire lanes blocked, and regardless of the speed at which you're travelling, a collision here will count as an automatic crash. Since the CPU vehicles get a boost start when they respawn and you don't, you can end up 20 seconds behind from a single fender-bender you couldn't reasonably have avoided. Chaining boosts can sometimes help you catch up, but it demands non-stop driving at top speed – which would be less of a problem if traffic didn't occasionally spawn right in front of you. Oddly, you can seemingly game the system by driving slowly, but witnessing the pre-launch leaderboard numbers being halved after one of these events rather proved our point: *Dangerous Driving* simply isn't suited to a mode that won't let you crash. Patched out, or left optional, these wouldn't be enough to stop most from happily reliving *Burnout*'s heyday; currently, however, it would be reckless to recommend.



ABOVE There's Spotify integration for those with Premium accounts. The developer's suggested – if particularly rock-centric – playlist fits rather well with the fast-paced, crash-punctuated action happening on screen

MAIN There are three unlockable vehicle types within each class. Prototype models are faster but flimsier, while Advanced cars are less likely to be taken down.

Chain boosts in a Tuned vehicle, meanwhile, and your top speed will increase slightly each time – though it's reset when you crash.

ABOVE You rarely get a good look at your environment with the speed blurring everything outside your immediate vicinity, but one or two tracks look almost *Out Run*-esque.

RIGHT Your opponents will race off, forcing you to play catch-up. You'll find yourself among the pack quickly enough, but streaking ahead is all but impossible



Heaven's Vault

Cambridge studio Inkle's 2014 debut *80 Days* was, in a sense, about weaving a timeline, a girdle of decisions and encounters around the globe. It might have been defined by haste, with you searching for the quickest routes between ports, but it also let you spin back the hours and run a finger along the thread you'd drawn through its world. *Heaven's Vault* continues this thinking, but widens the scope from 80 days to thousands of years, and from one planet to many. In place of an improvised itinerary, it features a literal timeline that swells with detail as you sail the game's waterlogged nebula, following celestial rivers to ruined planets and mulling over the artefacts they harbour.

Events are gradually sorted into periods, guesses about dates erased or hardened into certainties, ancient feats and devices heaved into the light. It may sound rather dry, but much as *Passepartout* and *Phileas Fogg* served as your window on the alt-colonial world of *80 Days*, so the aeons within *Heaven's Vault* are channelled through Aliya, the game's flippant protagonist. Her life is recorded on the timeline, from a lonely orphan upbringing to her first meeting with snippy robot sidekick Six – and so is your own, each major in-game decision or discovery set down in realtime, tethering your daily existence to the game's events. It's a powerful departure from the abstract way other games treat the concept of history. *Heaven's Vault* doesn't regard its past as inert lore, but as an ongoing story, something that writes you as you write it.

Writing is crucial. *Heaven's Vault* has elements of the classic point-and-click, with simple but sumptuous 3D environments to comb for objects you might combine or show to one of Aliya's academic acquaintances, perhaps in the hope of trading it for another. These are gentle conundrums, however, never more than a matter of following the layouts to things you can interact with. The game's real complexity and charm lies with its fictional ancient language, which is found on most of the artefacts, and which you'll slowly master over the course of the 20-30 hour plot.

You're generally offered two or three possible translations per word, based on others you've already translated correctly or incorrectly: these are presented alongside the original text, so it's easy to compare. Context sometimes helps – if a phrase is engraved on a blade, it probably isn't about watering crops – but the most enjoyable insights come from puzzling out connections yourself. You'll learn, for example, what distinguishes a noun from a verb, or a word for a person from a word for a thing. You'll also navigate degrees of literalness – is that message chiselled into a statue's base an account of the stars, or a reference to celestial wisdom? It's rare to nail a phrase at first glance, and you'll occasionally stumble on words that are unlike any

Developer/publisher Inkle
Format PC, PS4
Release Out now

Doesn't regard its past as inert lore, but as an ongoing story, something that writes you as you write it



MIRAGE OF WONDER

There's a definite economy to *Heaven's Vault's* art style, with characters appearing as a handful of hand-drawn stills, but the game makes sparseness a strength. The contrast between 2D characters and 3D architecture (predominantly influenced by Islamic traditions) supports a plot theme of people being outlived by places and belongings that have no meaning without them. When moving Aliya around, after-images appear in her wake, as though she were collapsing into air next to the enduring reality of the buildings around her. There's a similar power to the sparing use of voiceover, with Aliya uttering the odd sentiment aloud – marking key developments and your arrival at each site, while setting the tone for the many lines of textual dialogue that ensue.

you've encountered, but remarkably in light of its open-ended structure, *Heaven's Vault* gives you enough to go on that you'll seldom be utterly mystified.

The plot takes you to over a dozen sites, with two or three generally available at any one time, and branches a little based on your dealings with other characters. The language is the one constant, flowering unobtrusively in your mind as you tack back and forth across the nebula. That's not to say there aren't rough spots, many due to the unavoidable tension between the act of translation and the need to make said translation accessible to an audience not steeped in philology. Translated words are treated as potentially correct, to begin with; repeat the feat a few times, and the game will assume you've learnt that word and drop the question mark. This saves you the trouble of actually memorising another vocabulary, but it might also keep you from understanding why, exactly, you've got a word right. Aliya is both your character and your mentor, theatrically castigating herself and you when you're off by miles, which can give rise to the feeling that you're jumping through hoops.

These misgivings are offset by the smart, affecting dialogue, which weaves a picture of a universe every bit as mesmerising and MacGuffin-rich as BioWare's best, but rather more concise. Much of the writing's achievement lies with how it disempowers you: you're occasionally given explicit responses to pick from, but much of the time you're asked to choose between a "question" and "remark". This ought to feel constricting, but most such conversations are more about exploring possibilities than resolving them, which takes the pressure off. Beyond the mechanics of dialogue, the script handles tricky themes with praiseworthy care. Two prominent ones are class and colonialism – Aliya is notionally a peasant from a backwater world, but her association with academia, an elitist institution, means she's often received as a representative of the powers that be. There's also a familiar strain of sci-fi existentialism to her relationship with Six, whom she insists on perceiving as a disposable machine for all his very human moments of poignancy and prissiness, which eventually becomes central to the narrative.

If only the act of exploring the nebula were as elegant as everything else. The astral river network is wondrous to behold, swinging around and beneath like the view from a *Wipeout* cockpit, but the ship handling is awkward and the semi-manual camera often your greatest foe. Thankfully, there's no possibility of crashing, and you can reset to a junction if you take the wrong route. Such sporadic inelegances aside, *Heaven's Vault* is a beautiful return for Inkle, a bewitching fable that conveys something of philology's fascination while dodging its tedium. It lacks the infectiousness of *80 Days*, but as a story and a reckoning with history, it leaves most videogame fantasies in the shade.



ABOVE There's no real threat in *Heaven's Vault*, but the windblown ruins can be eerie, especially when you're separated from Six. What's more, not all are uninhabited.

RIGHT Levels of affluence vary hugely across the nebula's planets, as do beliefs about the nature of the universe. One of the more popular faiths preaches a philosophy of eternal recurrence



BELOW *Heaven's Vault* imagines space as ribbons of white water coursing through pink cloud. Rapids give way to sparkling bayous, and planets appear as rock outcrops



ABOVE The chance to try for alternative story outcomes aside, the game's NG+ mode allows you to start your exploration over while keeping all of the words of ancient script you've learned in your previous playthrough

Baba Is You

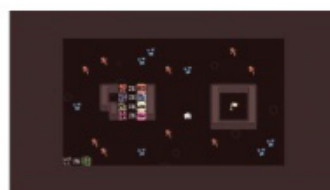
Arvi Teikari's spellbinding puzzler has one of the great videogame trailers of recent times. It's one of those high-concept premises that instantly sets your synapses firing, as you grin in delight and wonder at the possibilities. Having a bright idea is one thing; developing it successfully is another matter. Yet it's a challenge to which Teikari rises, and then some.

It's *Sokoban*, essentially, but the blocks you push around are verbs, nouns and connectives: Baba (a small, long-eared quadrupedal creature) is you, fence is stop, water is sink, skull is defeat. These rules are in place at the start of a stage, but you'll need to rewrite some of them to progress. Take the yellow flag that's usually your goal: it might be floating in one stage, and surrounded by a moat or wall the next. Perhaps, then, you can change the win conditions – or maybe even change yourself. Its commands don't always make grammatical sense, but its logic adds up, even if you have to pause to realise how bonkers it sounds. One moment you're pushing lava, the next you're teleporting verbs through love hearts, or you're controlling a crab and Baba simultaneously.

Teikari's puzzles have a habit of making you feel like you're cheating the system – almost as if you're a

You can tap Z to undo individual moves with no penalty – in fact, you can hold it down as long as you like to rewind without restarting a stage entirely. It checks you're certain when you do decide to start again

Developer/publisher Hempuli Oy
Format PC (tested), Switch
Release Out now



MAP IS GOOD

Puzzles are scattered across *Baba Is You*'s island map, but you're not required to complete every one in your current area before the next becomes available. It's a smart and considerate way of giving players the choice to carry on rather than demanding they master more difficult challenges. And since each area begins with a relatively gentle introduction to a new concept, you'll find you're able to make headway if and when an individual puzzle has you stumped.

hacker dealing with a strange new visual programming language. You'll stumble across solutions that seem inelegant, but these tend to be the most thrilling of all, as you kid yourself that you've outmanoeuvred the designer. Over time you steadily catch on to its vocabulary: you'll know that any rules around the edges are immutable. Except suddenly they're not. A single verb – 'pull' – changes everything you thought you knew. And then you'll find there are others you can negate with a 'not' block. Add 'move' and it becomes a sort of turn-based Roguelike, with objects shifting a single space when you do.

It's been a while since we encountered a game that so consistently finds ways to reinvent itself. Later on, it can feel fiddly – its best stages are those that cleverly subvert simple ideas – and, inevitably, the epiphanies are never quite as satisfying as the early ones. But like the best puzzlers it leaves you feeling defeated one moment and elated the next, when the germ of an idea takes root in your mind and you realise – yes! – it's going to work. And you'll marvel at the way it plays on your complacency by subtly teasing a solution, only to require some careful manoeuvring before it comes together. It only ever fools you in fair ways, in other words. That's just one more reason why *Baba Is You* is one of the most distinctive, exciting and fully realised puzzle games we've played in years.

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Jupiter & Mars

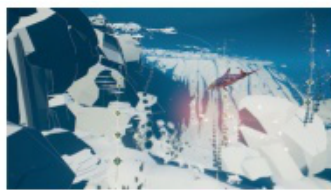
The debut from James Mielke's Tigertron appears to be a gentle exploration game, but you quickly realise it's more like an underwater *Metroid*. Its area gating has something to do with it, but *Jupiter & Mars* captures a similar sense of splendid isolation, in a setting that's at once beautiful and forbidding. And with its moments of otherworldly strangeness and troubling glimpses of humanity's impact on our oceans, it's not just the fact you're playing as a bottlenose dolphin that gives it echoes of *Ecco*.

In fact, you're playing as two, since this is a first and thirdperson game all at once. You see through the eyes of Jupiter, using echolocation to navigate a sea that's sometimes a little too dark for its own good. Sending out a pulse highlights nearby objects in wireframe, giving clearer form to otherwise indistinct shapes, while objects you can interact with are highlighted, sending a rumble through to the controller. Meanwhile, you command your partner, Mars, to smash rocks and prod clam shells, some of which yield treasures (from rubber ducks to teapots and tiny tridents) for your collection.

You can tell Mielke's worked with Tetsuya Mizuguchi: it's there in the gentle musical effects, the uplifting soundtrack and the giant whale that becomes

The further you get, the more you'll be tempted to switch to TV mode. The game's stylised art looks sharper here, and those large open spaces don't feel quite so sparse when they're not completely surrounding you

Developer Tantalus, Wicked Witch
Publisher Tigertron
Format PS4, PSVR (both tested)
Release Out now



JUST CAUSES

Two short videos, which can be viewed from the pause menu at any time, highlight the efforts of two organisations seeking to improve environmental awareness of our oceans. SeaLegacy is a nonprofit whose photographic work is designed to highlight unprotected areas as well as places that are under threat. Meanwhile, The Ocean Foundation is aiming to attract environmentally-conscious donors to increase the funds available for the conservation of marine life.

your method of fast-travel between areas — once you've rescued its calves, that is. Breakable walls, deeper waters and icy areas make it clear you're going to return to an area even when you seem to have detangled all its turtles or rescued every crab, though the don't-go-here-yet text rather breaks the spell.

In its best moments, *Jupiter & Mars* captures the eerie majesty of the sea: one new area welcomes you by letting you watch both dolphins swim together to an oddly poignant version of Ravel's Bolero. There's a surreal boss fight of sorts against a huge creature, and a striking set-piece involving a Ferris wheel collapsing. But it stumbles with its more conventional systems. Pulsing electrical objects require you to duck behind rocks before smashing their generators to turn them off, but these firstperson stealth sequences are clunky. A sparkling light gives you a general bearing for your next key objective, but sometimes the way forward involves first heading in a very different direction; here, Jupiter's slow swim speed becomes steadily more frustrating.

Yet this game lingers somehow when you're not playing — when you're not squinting into a dark corner looking for that last pufferfish, you'll be thinking about its haunting atmosphere and, yes, its environmental message. For Tigertron, a studio established for the very purpose of exploring real-world concerns through games, you'd have to say that's job done.

6





Orcs Must Die! Unchained

After death, Robot Entertainment's spirited
tower-defence game lives on as memento mori

BY JEREMY PEEL

Developer/publisher Robot Entertainment Format PC, PS4 Release 2017

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When Guillermo del Toro took to the stage during 2019's Oscars ceremony to present the Academy Award for Best Director – a welcome bumbling, disarming presence in a high-pressure environment – he took the opportunity to remind the nominees that none of their work would be lessened for the result he was about to read out. Each frame of their films would remain unchanged, equally as powerful as they were before the ceremony started. It was an important message. We only wish the same was true for the developers of live games: the ones that don't win, and instead watch their work diminish over time until it reaches vanishing point.

On April 8, 2019, *Orcs Must Die! Unchained* shut down. The winking voice lines written and recorded for its cast of dwarves, gnolls and wizards will never be heard again, its intricate maps unseen outside of YouTube videos and the portfolios of the game's artists. The orcs, we suppose, are enjoying a reprieve. It's an unjust end for an accomplished nominee that did not win its category. Moreover, it's a particularly cruel twist in a story that involves not one, not two, but several game deaths – the massacre of a softography.

There was cause for optimism at the start. Robot Entertainment had found huge success with the *Orcs Must Die* series, particularly on PC, where the best measure of its success was just how easy it was to find a co-op partner. It's easy to see why Robot's formula for thirdperson tower defence had proved so popular. *Orcs Must Die* offered immediate and satisfying action where the genre ordinarily maintained a level of remove, firing flailing orcs into fire pits for the amusement of its cackling players. The strategy was compartmentalised into momentary pauses in the bloodshed that allowed you time to think. And its setting went high fantasy when BioWare and CD Projekt Red were going low, putting you in the pointy metal shoes of a protagonist who wore a dumb smirk as he ran through the 20th videogame riff on Helm's Deep. While in-game War Mages were constructing impenetrable walls and chicanes to trip up and incinerate a green wave of monsters, there were few such barriers to prevent players from getting stuck in.

Robot had momentum, and a strong idea of where to go next. While *Orcs Must Die* had been singleplayer, its sequel had thrived on co-op, and for its next trick the Texas studio would refit the formula for competitive multiplayer – a territory most of the biggest PC games in the world occupied. By the time of *Unchained*'s beta in 2014, 27 million people were logging into *League Of Legends* every day. What's more, *Orcs Must Die* already had the makings of a MOBA: heroes battled amid a throng of minions to prevent the destruction of a focal point back at base. Fundamentally, all Robot needed to do was stick a mirror down the middle of the map, so that there were heroes and bases on both sides, and the orcs were helping to smash their way through an opposing team's defences.

It wasn't just Robot that saw the potential. A year after the beta began, the studio received a minority investment from Chinese internet giant Tencent, an event often seen as a predictor for enormous live-game success. Indeed, Tencent took on a majority stake in Riot Games shortly before *League Of Legends* blew up, and a 40 per cent share of Epic Games as it started work on *Fortnite*. Robot had every reason to hope it would be next.

The multiplayer segment Robot built for *Unchained*, Siege mode, was true to the series. Ten heroes, across two teams, covered the corridors and choke points of the map with spike traps, flippers and swinging maces in an attempt to derail the train of fantasy monsters headed towards their rift – all the while battling limited funds and the heroes of the enemy team. The great, cathedral-style doors that the orcs charged through were upgradeable, with players determining the makeup of the horde over the course of a match. And as in previous games in the series, more doors were knocked down over time, ensuring an increasingly uncomfortable defence as the paths trap-builders had neglected filled with orcs. Unless heroes managed to pull off enough clever kill combos, that is, boosting their coffers and allowing them to prepare better for the next onslaught.

Nobody could say that *Unchained* was just another *Dota*-like – its PvE legacy ensured it played like nothing else. Robot ►

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and Tencent built a compulsive free-to-play infrastructure to match, too, drip-feeding trap upgrades and login rewards, handing players chests that burst open, showering the screen with gold. They had accounted for everything. Everything, except the possibility that PvP was a line existing *Orcs Must Die* fans simply wouldn't cross, no more than they would the tar pits and burning coals the orcs fell blindly into.

By 2016, Robot saw fit to publicly acknowledge that Siege mode hadn't worked out. It was bad enough that the majority of players were plumping for the secondary PvE mode that more closely resembled traditional *Orcs Must Die* – worse was that those that did try Siege were less likely to come back to the game at all. The studio determined that it wasn't enough to abandon development on Siege and refocus



defence. Physics traps (toned down in Siege mode, presumably because their unpredictability didn't lend itself to competitive play) were cranked up to their former absurdity, restoring physical comedy to its proper place at the forefront of *Orcs Must Die* once again. As recently as this year, however, the ghost of a MOBA was still visible in *Unchained*. Its heroes fired abilities mapped to the Q and E keys, and

Success in *Unchained* often came down to one or two well-placed barriers funnelling multiple enemy hordes through one particularly painful corridor

THE TRADITIONAL PART OF THE GAME, SUDDENLY ITS PRIMARY ONE, BENEFITTED HUGELY FROM THE ATTENTION

resources on PvE: it became necessary to strip Siege mode from the game entirely, as if it had never existed. "It's been difficult for us at Robot to come to terms with this feedback and data," wrote the developer in a patch post. "We've been thinking really hard – and even arguing some."

That was the first time *Unchained* died. In the years since, that painful decision showed itself to be a sound creative one from a PvE perspective. The traditional part of the game, suddenly its primary one, benefitted hugely from the dedicated attention, and an explicit effort to bring it closer to the experience of previous games in the series. Heroes which had straddled both modes, and left players complaining that they felt improperly balanced for either, could now be reconfigured for co-op tower

you made critical choices about how to upgrade them mid-game. There was a familiar genre satisfaction to the way those abilities encouraged you to hop into the fray, too: cutting a hole in your enemy's offensive, then darting out again before that hole closed around you. Stunning and slowing effects made it appropriate to use MOBA terminology such as 'crowd control', and individual heroes often had peculiar specialties that made them feel like a game unto themselves.

Dwarven engineer Brass, for instance, had a dedicated currency to her name, called 'scrap', which contributed to both the cost of explosive mines and maintenance of a turret, either of which she could plant anywhere in the map. Picking her meant your priorities were your own, even as you contributed to the group's shared defensive



It was rarely possible to mount a full defence before facing the first wave of foes – orc deaths funded further upgrades



MAN THE BARRICADES

It's not just the servers of *Orcs Must Die* that reached their sell-by date. While the games' wryly self-aware interpretation of *The Lord Of The Rings* has long been a draw, it's also proved a throwback too far at times. At one stage in the plot of the original games, our War Mage protagonist began referring to the voice of the villainous Sorceress in his head as a nag, setting tower defence back decades before the genre's actual invention. Then, when that Sorceress became playable in later games, she revealed herself to be a late proponent for some laughably ineffective '90-style chest armour. And even Brass, *Unchained's* resourceful engineer, had inexplicably covered her own wrench in lipstick kisses – such grubby details have been a disappointing refrain in an otherwise admirable series.

Right-angled architecture helped you think of maps as a grid to be blocked up, aiding tactical planning



The orcs didn't only knock down doors – sometimes they disembarked from ships or siege machinery

goals. Robot had succeeded in clawing back the irreverent heart of its older games, and the organs Siege mode had donated left the game stronger than ever. Or so it seemed.

"It's painful to even write this," wrote Robot CEO Patrick Hudson as he announced the planned shutdown. The audience that had abandoned *Unchained* had never come back, it transpired, and the studio had been operating the game at a loss for many months. Within a few more it was dead, joining the crypt shared by half of Robot's creations. Were you interested in going back and playing the studio's first game, *Age Of Empires Online*, you'd find that it's only accessible via a fan initiative called Project Celeste. Microsoft switched off its own servers half a decade ago, citing the expense of maintaining a game that had never recovered from unmet player

expectations at launch. It's a parallel as clear as that in the lanes of Siege mode.

You might remember Robot's early iOS hit, *Hero Academy* – a fantastic turn-based tactics game that let you submit your turn last thing at night and discover how your opponent in China had responded in the morning. That's gone too, disappeared from the App Store when Apple stopped supporting 32bit software, and finally swept from Steam on the same day as *Unchained*. *Hero Academy* even had a sequel, published by Robot and developed by fellow Ensemble Studios alumni, that had scarcely reached its first birthday before costs caught up with it. In short, the dead games in Robot's ten-year history outnumber the living.

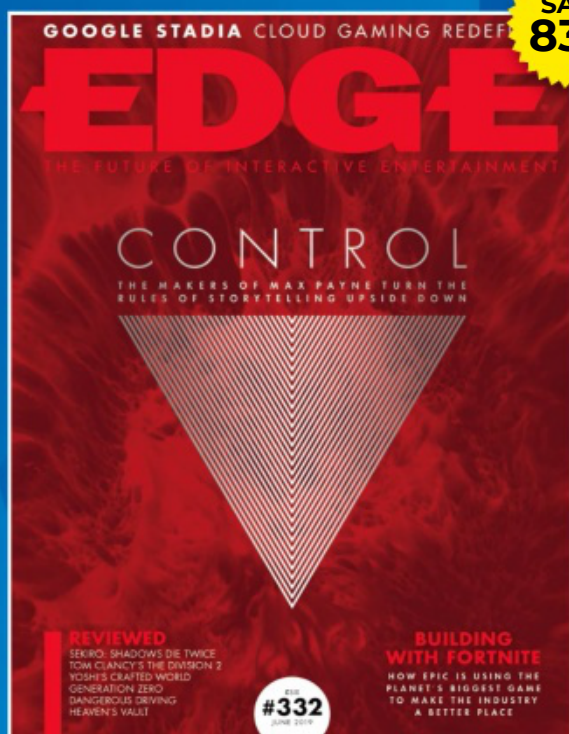
It's a sobering contrast to the catalogue of Ensemble, the studio from which Robot inherited most of its staff. While the *Orcs Must Die* team's predecessor had its own troubles – struggling to escape the orbit of the strategy monster it had created, *Age Of Empires* – you can still download all of its games, dating back to 1997. Ensemble was lucky enough to exist at a time when the only dead games were those that didn't make it to shelves. That's not true for Robot Entertainment, nor *Orcs Must Die! Unchained*, the exclamation mark of which is beginning to feel inappropriate. When future developers choose to make their games live, they ought to consider the survivorship bias at work in the success stories they see – and that all living things must eventually perish. ■



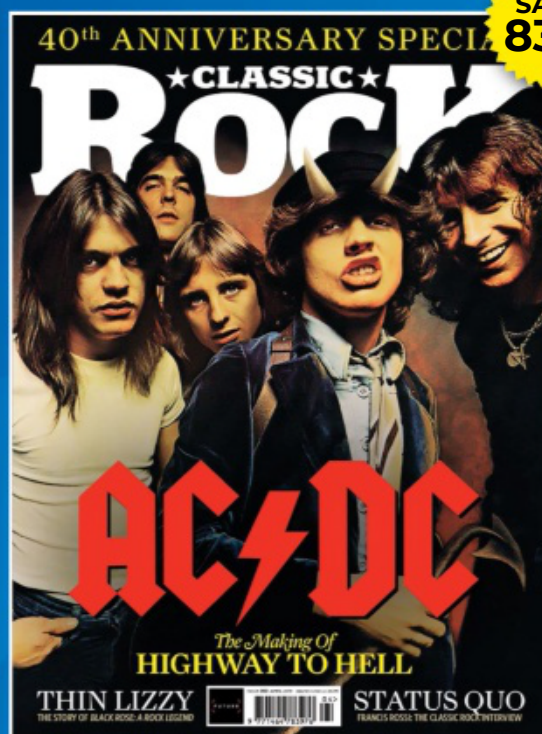
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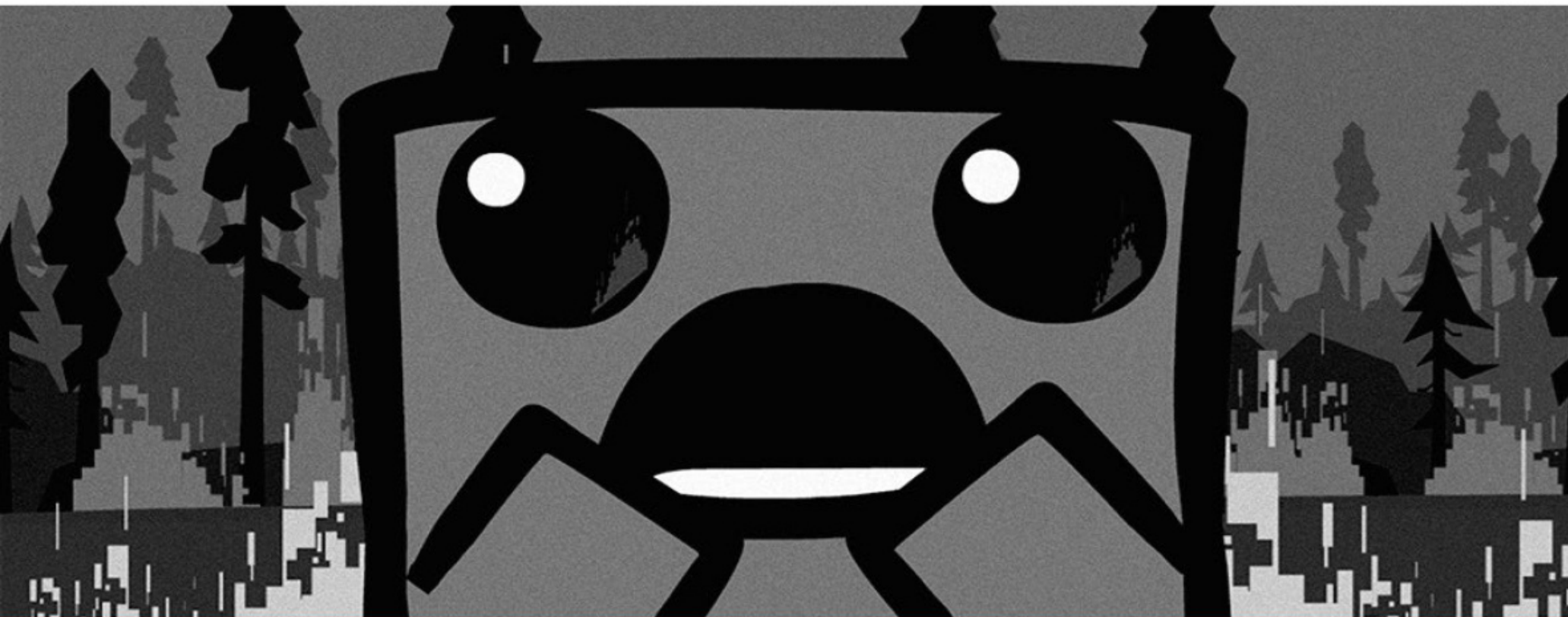
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A progress report on the games we just can't quit



Super Meat Boy

Developer/publisher Team Meat Format 360, PC, PS4, Switch, Vita, Wii U Release 2010

Super Meat Boy Forever, indeed. The forthcoming sequel to the beloved precision platformer feels completely justified: there's something about the series that deserves to stay with us, long after the original's 2010 release.

Upon returning to *Super Meat Boy*, there's one aspect that immediately stands out: its celebration of mistakes. Contemporary games still often treat player deaths as an aberration; in *Assassin's Creed*, for example, the concept of desynchronisation suggests that your slip-ups don't belong in the story, but are rather an error to be corrected. And before that, *Prince Of Persia* explicitly told us, "No, no, that's not how it happened!" Your falling into a pit of spikes served only to hold up the real story, as if you were an IT assistant failing to bring up the next slide in an irritated royal's PowerPoint presentation.

By contrast, you paint the cruel, concise levels of *Super Meat Boy* with your mistakes. When you misjudge a jump, the blood that explodes onto circular saws remains on your next attempt, a persistent monument to your failures and an organic red stop sign to remind you to decelerate. Each splatter is a lesson, not to be washed away, but studied and factored into the run you're working to perfect.

When you succeed, you get to watch all of your attempts play back together: tens or hundreds of Meat

Boys surging forward at once to their deaths, a festival of the many failures that taught you the way through. It's a moment that makes a wonderfully encouraging design philosophy transparent. By stripping away the shame of failure, *Super Meat Boy* lets you laugh at your mistakes, knowing they were not only part of the process, but an essential and enjoyable one.

There's something poetic in the fact that Ubisoft, the publisher of *Assassin's Creed* and *Prince Of Persia*, later adopted *Super Meat Boy*'s instant resets and infinite lives for the reboot of its own flagship platforming series, *Rayman*. But it's not a philosophy that's been adopted by the mainstream at large. FromSoftware, the contemporary master of masochistic gaming, has made an art of punishing players instead, rewarding you with ecstatic, if momentary, relief from the consequences of death.

But Team Meat is working once more to make masocore approachable, and *Super Meat Boy Forever* looks to bring that mission to a wider world. First designed as a mobile game, it reduces control to just two buttons, pulling down the barrier of entry for a new audience, so that it too can learn that screwing up while playing a game is nothing to be ashamed of. There's no regret in *Super Meat Boy*, only self-improvement: a design philosophy written in blood, and one that deserves to live forever. ■

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May 23



